THE

AMERICAN PRACTITIONER:

A MONTHLY JOURNAL OF

MEDICINE AND SURGERY.

EDITED BY

DAVID W. YANDELL, M.D.
Professor of the Science and Art of Surgery and Clinical Surgery, University of Louisville,

AND

THEOPHILUS PARVIN, M.D., LL.D.
Professor of Obstetrics and the Medical and Surgical Diseases of Women, Medical College of Indiana.

VOL. XXIII.

PUBLISHERS:
JOHN P. MORTON AND COMPANY, LOUISVILLE,
CATHCART & CLELAND, INDIANAPOLIS.

THE AMERICAN PRACTITIONER.

JANUARY, 1881.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Communications.

ON THE CURABILITY OF MALIGNANT TUMORS OF THE BREAST BY ADEQUATE OPERATIONS.*

BY SAMUEL W. GROSS, A.M., M.D.

Surgeon to and Lecturer on Clinical Surgery in the Jefferson Medical College Hospital and the Philadelphia Hospital.

In my treatise on Tumors of the Mammary Gland, which was issued from the press only a few weeks ago, I have endeavored to lessen, if not overcome, the reproach which has from time immemorial been attached to the removal of malignant diseases of the breast, by calling prominent attention to the modern doctrine of their primarily local nature, and to the possibility of assuring complete recovery by attacking the involved organ with a bold hand.

The malignity, or auto-infectiousness, so to speak, of a mammary neoplasm evinces itself, first, by its extension to the

* Being an abstract of a paper read before the Indiana, Illinois, and Kentucky Tri-States Medical Society, at its sixth annual meeting held in Louisville, November 10, 1880.

surrounding tissues, through which it continuously enlarges, occasions the development of secondary tumors in its vicinity, and is the cause of recurrence or reproduction after removal; second, by the transference of its cells to the associated lymphatic glands, in which they multiply and form growths which not only invade the adjacent structures, but act as additional centers of general infection; and third, by the occurrence of metastatic tumors in remote organs and tissues. These three attributes—namely, the contamination of the neighboring tissues, the implication of the lymphatic glands, and the development of similar growths in the viscera—may be common to a mammary tumor, or one or two alone may be met with; so that there is a scale of malignity for the different neoplasms of this class.

Myxoma and adenoma, of which the one originates in the connective tissue framework of the mamma and the other in the cells of the secreting apparatus, never infect the glands or the viscera; but they are eminently recurrent tumors, and come, therefore, under the classification of the semi-malignant growths of some practical surgeons. Myxoma reproduces itself in thirty-three per cent and adenoma in fifty per cent of all cases; so that the removal of the entire breast and its coverings, if they be implicated, and of recurrent growths as fast as they appear, suffices to bring about a cure.

Sarcoma, which is made up of embryonic connective tissue, and is usually described as fibroplastic, fibronucleated, or recurrent fibroid tumor, must be included among the worst of the mammary neoplasms, although it is generally regarded as being of limited malignity, most writers teaching that its tendency is to recur, but losing sight of the fact that it produces metastases. Unlike carcinoma, it does not affect the associated lymphatic glands; but the invasion of the surrounding tissues is shown by local reproduction in sixty-one per cent of all operations, and post-mortem inspection discloses visceral growths in fifty-seven per cent of all instances. While recurrence in loco is not so frequent nor so early as in carcinoma, sarcoma is followed by metastatic tumors in seven per cent more of cases than is that

affection. These are startling facts, and I must assume the credit of having been the first to establish them.

In view of the recurring nature of sarcoma and of its marked liability to infect the viscera, the surgeon must interfere early. He should discard partial operations, and make the rule absolute to amputate the entire breast with its investing skin and fat, by a circular incision, dissect off the fascia of the pectoral muscle, and mop the large wound with a strong solution of chloride of zinc, or touch it with the iron at a dull-red heat. Recurrent growths must be freely extirpated as rapidly as they appear, since in this way suffering may be alleviated, life be prolonged, visceral contamination be averted, and permanent recovery be assured in a certain proportion of cases. In an example of medullary small spindle-celled sarcoma Professor Gross succeeded, after removing fifty-two tumors, by twenty-three distinct operations in four years and a half, in the last of which large portions of the pectoral and intercostal muscles were cut away, in checking reproductions. Nearly eleven years subsequently the woman was entirely well. In a similar case Gay had added nine years to his patient's life at the date of the last report, and Heath and Haward kept their patients alive for thirteen years.

Carcinoma, which is an infiltrating epithelial neoplasm, and is ordinarily known as cancer, is the most malignant of all the tumors of the mamma. Its course is not only more rapid than that of sarcoma, the average duration of life being only thirty-nine months from its first observation to its final termination after operation, against seven years for sarcoma, but it implicates the lymphatic glands in sixty-four per cent of all cases, recurs in eighty per cent after extirpation, and occasions metastatic deposits in fifty per cent of all instances. These properties, along with the discouraging results following incomplete operations, have led some surgeons to refrain from interfering altogether, while others remove the disease with the view merely to avert mental and physical suffering. That both of these practices are erroneous is conclusively shown by the facts, first, that extirpation of the carcinomatous mass adds twelve months to

the life of the patient; and secondly, that bold measures result in permanent recovery in 10.51 per cent of all cases.

In the treatise already referred to I use the following language in regard to what I mean by the term cure or permanent recovery: "Metastatic tumors develop in thirty-one months, and death usually ensues, no matter whether the patients have been operated upon or not, in thirty-three months on an average. Local reproduction after removal is witnessed in less than one case out of every hundred after the expiration of three years; so that if the patient survives three years after the last operation without recurrence, or dies of some intercurrent malady under the same circumstances, I assume that she has recovered. Although, of course, each case will have to be dealt with in accordance with its individual merits, the question must be decided by facts based upon the general life of the disease. Of four hundred and eighty-five cases of ordinary scirrhous, medullary, colloid, and atrophying carcinoma, in which the history is complete, fifty-one or 10.51 per cent—and forty-seven were still living—fulfilled these requirements, the average life after operation having been four years and ten months. Of the cases in which the affection pursued a natural course only 1.5 per cent survived six years, while of those cured by the knife thirty per cent were living free from disease after the expiration of six years, four were alive for more than seven years, and the remaining eleven were well for periods which varied between eight and fifteen years."

The view that carcinoma is in the first instance a local disease, and that it is curable by thorough operations practiced before it has disseminated itself extensively in the adjacent structures or has tainted the general system, is rapidly gaining adherents among some of the best observers of the world, among whom may be mentioned Simon, Moxon, Arnott, Payne, Hutchinson, and Sir William Gull, of England; Nussbaum, of Munich; Fischer, of Breslau; Esmarch, of Kiel; Kocher, of Bonn; and Billroth, of Vienna. Apart from the practical test of the results of surgical interference, a study of the general

pathology of the disease shows, first, that it is at the outset a local degeneration of the mamma, and that its tendency is to advance toward the surface before it invades the deeper structures, the lymphatic glands, and the viscera; and secondly, that local infection does not ensue, on an average, before the expiration of thirteen months, the skin being involved in fourteen months, the lymphatic glands in fifteen months, the walls of the chest in twenty-two months, and the viscera in thirty-one months. Hence if the carcinomatous mamma can be completely gotten rid of before it has contaminated the adjacent structures there is no reason why the remedy should not prove to be final.

When the tumor is of moderate volume, and devoid of superficial and deep attachments and palpable enlargement of the lymphatic glands, the operation which I now invariably practice and earnestly recommend is to remove the entire breast and its coverings by a circular incision, search for any outlying lobules that may be disseminated throughout the mammary region, dissect off the fascia of the pectoral muscle, and prolong the outer portion of the incision into the axilla with a view to its thorough exploration. Although the glands may have eluded detection previous to surgical interference, careful examination will usually disclose that several are already converted into secondary tumors; and in this event the axillary space must be thoroughly cleaned out, with the object of getting rid of so many independent sources of infection of the adjacent tissues and the associated glands. Ample experience shows, first, that the seats of recurrence, or, rather, further spread of the disease, after operation, are the skin, paramammary fat, remains of the mamma, pectoral fascia, and glands of the axilla; and secondly, that recurrence in the axilla is more frequent by twenty per cent after removal of the breast alone than when that cavity was freed of its contents simultaneously with the extirpation of the breast. Hence it is that bold measures alone can be depended upon to assure a successful issue.

Even when the skin, pectoral fascia, muscles, and glands are implicated, provided the evidences of local dissemination be not

too extensive, thorough operations frequently result in permanent recovery. Thus out of forty-eight of the fifty-one cures in which the extent of the operation is noted, in nineteen the entire breast was amputated and the axilla was cleaned out; and in several of these there were nodules in the skin and the upper layer of the great pectoral muscle was removed. It is, moreover, comforting to know that the glands may be merely the seat of irritative hyperplasia, since in three cases in which they were permitted to remain the patients were free from recurrence respectively for five years and nine months, six years and one month, and ten years and ten months. Glandular involvement is, however, of bad prognostic import, as the chances for permanent recovery are three times greater when the breast alone requires amputation. The same statement is true of extensive infiltration of the pectoral muscles, but these may be cut away with a free hand with some prospect of relief.

As a precaution against local reproduction the wound may be sponged with a strong solution of chloride of zinc or be seared with the hot iron, and the latter agent should always be resorted to when nodules have been cut out of the pectoral or intercostal muscles or the ribs or costal cartilages.

While it is true that adequate operations greatly increase the mortality, they are certainly justifiable, as they alone can be relied upon to cure a disease which is so inevitably lethal as carcinoma. In favor of the method it may be said that as the wound is an open one the danger of the retention and putrefaction of discharges and of the evil consequences which follow these accidents is obviated. In my own hands the operation has been attended with the best results, since of ten cases in which I amputated the entire mamma and its coverings, dissected off the pectoral fascia, and cleaned out the axilla, all recovered.

PHILADELPHIA, 1112 WALNUT STREET.

PLACENTA PREVIA.*

BY J. P. THOMAS, M.D.

While few subjects in the whole domain of obstetrics have (during the last two centuries) given rise to more discussion than placental presentations, it is only within the last fifty years that any real advance in the management of this freak of nature has been made. The ancients believed this abnormal position of the placenta to be the result of accident whereby it was detached from its proper site, to this being superadded the force of gravity. Portal is generally credited with the discovery that this position of the "after-burden," as he called it, was an original insertion of the placenta over or adjacent to the os internum. Cazeaux ascribes the discovery to Gifford, and without mentioning Portal credits Levret with having first directed attention to it, and demonstrated its frequency and danger, as well as pointing out the proper mode of detecting its existence, and adds, "The insertion of the placenta over the os uteri has been considered since the days of Levret as an inevitable cause of hemorrhage during the last three months of gestation and during the course of parturition."

Though the causes of placenta previa have been variously stated by different authors, our actual knowledge of the subject amounts positively to nothing. We know but little more than that perhaps once in six or seven hundred cases the placenta is placed over or near the os uteri. Cazeaux thought that the uterine mucous membrane is perhaps less swollen and turgid than when conception takes place in the natural attachments of the placenta, and that therefore it offers less obstruction to the descent of the ovule to the lower part of the uterine cavity, etc. Tyler Smith held that the ovule does not become impregnated until it reaches the lower part of the uterus in the preplacental attachments. But the cause of this location of the placenta

* Read before the McDowell Medical Society, October, 1880.

is as far from being understood now as it was two hundred years ago.

There are perhaps equally as many theories as to the source of the hemorrhage in placenta previa. I shall notice but one of these. Simpson, following Chapman, of Ampthill, England, suggested that the source of the flow is from the placental vessels, and not, as is at present generally admitted, from the uterine surface. Hamilton, of Edinburgh, claimed that the hemorrhage proceeded from the separated portion of the placenta rather than from the ruptured uterine vessels. Simpson's earnest and able advocacy of the first theory, and the practice of detaching the placenta *en masse* which resulted, have been the cause of a most pernicious practice, namely, removing the placenta in all cases of placenta previa. This practice, based as it is upon the false theory that the hemorrhage is placental, and not uterine, has been the cause of the death of the child in many cases where by partial detachment of the placenta and immediate version or forceps-delivery both child and mother might have been saved. A mere glance at the anatomical distribution of the placental arteries, together with a study of its physiology, should, it seems to me, convince any one of the fallacy of this theory. Yet because in so many of his cases the hemorrhage ceased on the removal of the placenta, Simpson was, it seems, satisfied of its correctness. Tyler Smith, in dissenting from Simpson's theory, says, "Detachment of the placenta causes irritation, which excites the uterus generally, and in the muscular structure at the site of the placenta especially, to contraction, and in this way the hemorrhage is prevented or arrested." Certain authors have erroneously declared that uterine contractions actually increase the flow of blood. Aside from the fact that contractions still further detach the placenta, there is no reason why they should not aid in arresting hemorrhage, as they clearly do in post-partum flooding in natural labor. Speaking from individual observation, I believe that uterine contractions perform the same office in arresting hemorrhage in partial or complete placenta previa that they do in flooding after natural labor,

Barnes's zonular theory to the contrary notwithstanding, and that the apparent increase of the hemorrhage is, as stated by Playfair, but the expulsion of the blood already accumulated. Yet that Simpson's practice of detaching and removing the placenta is in some cases most excellent practice, experience teaches me. This opinion is based upon an experience of three cases, one of which I will briefly report. In this a centrally inserted placenta was detached and removed from necessity.

Mrs. W., aged thirty-eight, had six natural labors. In three of her pregnancies she had during the eighth month slight hemorrhages — the last, however, sufficiently profuse to demand a vaginal examination. I had difficulty in introducing a single finger, yet the diagnosis of central implantation was satisfactorily made out. The situation, with its attendant dangers, was fully explained to the husband, and premature delivery advised. But neither his entreaties nor my advice won her consent. I therefore enjoined perfect quiet in the horizontal position, and left instructions to call me immediately should hemorrhage recur. This advice was not followed. The patient continued to attend to her household duties, and, as I afterward learned, had attacks of hemorrhage every five or six days, which, however, ceased on lying down. Two weeks later I was sent for in great haste to find her in active labor, the os dilating rapidly, the placenta covering the cervix except a space large enough to permit the finger to touch the bag of waters and detect a vertex presentation. The patient, however, was so alarmingly prostrated from loss of blood that turning at that time was out of the question. I did not then, as now, have Barnes's invaluable dilators, and, fearing the tampon would but complicate the case by substituting a concealed for an open hemorrhage, I administered a full dose of ergot, and detached and, after ligating the cord, removed the placenta. I hoped that the bag of waters would take the place of the tampon and acting as a plug from within arrest the hemorrhage at least long enough to enable the patient to rally sufficiently to stand the operation of turning if not that of rupturing the membranes and delivering by forceps. But in

detaching the placenta I unintentionally ruptured the membranes, whereupon the head came down, the vertex engaged the os, and all hemorrhage immediately ceased. This fortunate result was not attained because the source of the hemorrhage was placental, nor by the contractions of the uterus alone, but appeared mainly due to the mere mechanical effect of the child's head, which, occupying the former site of the placenta, made such pressure upon the open mouths of the uterine veins that it served as a veritable plug. The contractions, stimulated by the ergot, were frequent, forcible, and somewhat prolonged, and must have assisted somewhat in arresting the hemorrhage, not only by closing the mouths of the vessels and hastening the descent of the head, but also by causing the bleeding surface to hug the head more closely. The pains were so strong and persistent and the head now so low in the pelvis that turning became impossible; and even had it not been, the patient, after two hours of exemption from hemorrhage, but in severe labor, was too much exhausted for the procedure; so the forceps were applied and a dead child delivered. Considering the excessive loss of blood and the severity of the pains, which were allowed to continue for so long a time because of not having my forceps at hand, the mother made a good recovery.

The foregoing case will serve to show that Simpson's practice of removing the placenta and leaving the case to nature altogether loses sight of the safety of the child. I think there are cases of central placental presentation, where the os is dilating or dilatable, and the labor has set in at full term or sufficiently near it to insure the viability of the child, when the safest practice for both mother and child would be the detachment and removal of the placenta and prompt delivery either by version or the forceps, the choice being determined by the circumstances of the individual case. In two such instances I have resorted to this procedure with the result of saving both mother and child, when I believe any other course would have resulted fatally to the children if not to the mothers also. The pressure of the head upon the bleeding surface of the uterus where the entire

placenta is removed is not, I think, as fully appreciated by authors as it should be; for certainly where contractions are active, and the head has descended well and is still advancing, this always acts as a plug and thus effects the arrest of the hemorrhage. May it not have been the most efficient cause in many cases reported by Dr. Simpson and others? The following case will, I think, go to prove that the child is not lost by simple waste of blood, but by asphyxia; while it will serve to show that the source of the hemorrhage is principally uterine, and not placental:

Several years ago I saw, in consultation with the late Dr. Porter, Mrs. M., about thirty years of age, a previously healthy woman, accustomed to work, the mother of four living children coming after natural and easy labors, these attended by a midwife only. I reached her bedside only in time to find her dying of hemorrhage caused by a centrally-implanted placenta, and she still undelivered. She gasped but three or four times after my arrival, and expired. She was flooding profusely when Dr. P. was called in, and was so much prostrated that he resorted to the tampon, using for the purpose a silk handkerchief, which, I may remark in passing, answers an excellent purpose where vaginal tampons are applicable, which, though contrary to high authority, I think are very few. The placenta still occupied an almost central position, with its margin only undetached, the os being sufficiently dilated to engage the head. With faint hopes of saving the child, as very feeble fetal movements could be felt, I performed cesarian section within twenty minutes of the death of the mother—perhaps less time—and a well-developed male child at full term, partially asphyxiated, but soon restored, was extracted. A few years ago he was a robust boy of ten years.

From 1870 to 1875 I produced premature delivery in three cases—one in the eighth month, one in the first week of the ninth, and one only two weeks before term—with the result of saving the life of the mothers, but with the loss of two of the children. The seventh-month child was delivered after partial

detachment of the placenta and podalic version. It was still-born. The eighth-month child was delivered after complete detachment of the placenta by immediate turning. Both child and mother lived and did well. The case in which labor was induced two weeks before the expiration of gestation was also delivered by turning, and nearly complete detachment of the placenta. The child lived only a few hours, and the mother had a tedious recovery, having an alarming attack of phlegmasia dolens.

In the past five years I have effected premature delivery in three cases after the seventh month, saving the lives of the mothers and one of the children. Though this so-called prophylactic treatment of placenta previa is indorsed by Barnes, Hewitt, Greenhalgh, and others, in England, and by others of note as Thomas and Parvin in this country, I am persuaded that in some cases it is an unnecessary procedure and in others unjustifiable as to the safety of the child. I venture this opinion notwithstanding Thomas reports eleven cases in which the practice was resorted to solely as a prophylactic measure, with a loss of but five children and the death of one mother, and she from puerperal septicemia, which might have occurred after natural labor. It is well known that a miscarriage is generally more dangerous than labor at term, and that version at best is always attended with danger to the child from pressure on the cord. Consequently in cases where the hemorrhage is slight and infrequent, and the patient can be closely watched and controlled, and some one of the bromides combined with hyoscyamus be continuously given, they can generally be conducted safely to the end of gestation without impairing to any considerable extent, by loss of blood, the physical powers of the woman. The hypnotics persistently given seem to control even the insensible contractions of the uterus, to which the hemorrhage is certainly due in some cases. Two cases of marginal placental attachment under my care were thus conducted to full term, the hemorrhage in each case being slight and occurring at the menstrual period only. Both were safely delivered of living children after partial

detachment of the placenta, and by podalic version, and within three weeks were well. In both cases the diagnosis of placental complication was clearly made out from the first hemorrhage.

Under such conditions then—that is, where the flow is slight and infrequent, and having in view the dangers incident to miscarriages, and the undeveloped state of the fetus, rendering its viability less certain—I ask, Would I have been justifiable in either case in inducing premature delivery? In the history of Thomas's eleven cases this procedure was not only justifiable, but demanded in ten of them. But in his first case I think he should have temporized a little longer, at least. But as it is clearly impossible for the majority of general practitioners to give necessary attention in preplacental cases, and as it is an established fact that after the first occurrence of hemorrhage the woman is never free from danger until delivered, I am inclined to the opinion that in any case where the diagnosis is clear, the flow frequent and profuse, and the patient resides some distance from the medical attendant, premature delivery should be induced in the interest of the mother even before the period of viability of the child and without regard to its safety. But fortunately hemorrhage rarely occurs before this period. With Barnes's dilators there is but little risk of excessive hemorrhage, as they not only dilate the os sufficiently rapidly, but act so securely as a plug that in one of my cases the os was dilated by a gradual dilatation (three sizes being used), the placenta partially detached and turned back on itself, and the child delivered by version with but slight loss of blood, the uterus contracting promptly all the while.

There are cases in which nature proves herself competent to accomplish delivery with safety to both mother and child. In 1869 and 1870 two cases occurred in my practice which show what nature does sometimes accomplish, and how closely we imitate her when we induce premature delivery:

Mrs. C. was taken suddenly in labor, each pain being followed by a gush of blood. I reached her only in time to grasp the placenta as it emerged from the vulva. The labor was so

rapid and the contractions so powerful, the child under size (the pregnancy being only seven months and two weeks advanced), it almost instantly followed the placenta enveloped in the membranes. This child lived a few hours only, but the mother made a rapid recovery.

Mrs. K.'s case was similar, except she was about eight and a half months advanced in pregnancy. Here both mother and child were saved.

In both the placenta was first expelled, the child and membranes following almost instantly, and both made as good recoveries as after natural labor.

A case recently occurring in the practice of a confrère will still further illustrate how nature sometimes accomplishes safe delivery: Mrs. S., aged twenty-six, mother of three children, was seen by Dr. L. He found her fearfully prostrated by hemorrhage, so much so that he thought the loss of a few ounces more would have resulted in death. The flooding had fortunately entirely ceased; the placenta lay compressed between the head and the os, one third projecting into the vagina. He gave a large dose of fluid extract of ergot, and pressed the placenta back with his finger as the head advanced. No more hemorrhage occurred, labor proceeded, and a living, fully-matured child was spontaneously delivered.

In 1878 Mrs. R. was taken in labor and simultaneously with free hemorrhage. Dr. ——, the family physician, was sent for, but being absent Drs. —— and —— were called in. They found the patient extremely prostrated, though the hemorrhage had ceased. They detected a nearly centrally-inserted placenta, and determined to endeavor to rally the woman by stimulants and bring her as quickly as possible to the point where version might be practiced. Just here the physician first sent for arrived, and declining to listen to the physicians in attendance proceeded at once to detach the placenta and turn the child. The shock proved too much for the already exhausted woman, and before the head escaped from the vulva she was dead. The child was alive, and still is, I believe.

Turning is *the* operation in placenta previa, and must continue to be with the general practitioner, and, in fact, with the great majority of the profession; first, because where the child has reached the period of viability, and is living, it offers the best chance, if performed before the mother has lost too much blood, for both mother and child; secondly, if the child is not viable or dead it is the quickest way to empty the womb of its contents, and thereby hasten contraction and save the mother; thirdly, it will be the operation most frequently resorted to, because comparatively few practitioners are supplied with the proper instruments, and when this is the case they seldom have them at hand, and they always have the best obstetrical instrument ever devised—the right arm and hand.

I have not alluded to the differential diagnosis of placenta previa because it is generally so easily made out by the touch and the mode and history of the development of the hemorrhage. I should perhaps add that I have never been able to detect the placental bruit in such cases as have occurred in my practice. In no case in which the os was sufficiently dilatable to admit either one or two fingers did the touc fail, whether the attachment was central or partial, to diagnose the case. If the insertion be marginal the os should be dilated sufficiently to admit two or more fingers, or, if need be, the whole hand, in order to discover the placental site and establish the diagnosis.

During an obstetric practice of twenty-five years I have met with but thirteen cases of placenta previa. In these but one mother was lost, but seven of the thirteen children were either stillborn or died—a mortality of over fifty per cent. Should further experience establish that premature delivery will lessen this fearful mortality, it should certainly always be performed whenever possible.

There is no emergency in the whole field of medicine which requires greater judgment or prompter action on the part of the physician than does placenta previa. The late Dr. A. K. Gardner, of New York, said, "Perhaps the greatest element requisite for an accoucheur is decision; he should be able to recognize

what is possible and what is impracticable, and early know what he can do and what he can not effect." He should always go armed with the best appliances for dilating the os uteri, for effecting speedy delivery, and arresting hemorrhage.

Since the above was read before the Society, the following case having occurred in my practice, I report it simply on account of its being so rare at so early a period of gestation:

C. R., mulatto, aged thirty, mother of three children, on October 30, 1880, was, after only two or three very severe pains, suddenly attacked with profuse uterine hemorrhage. The flooding was so alarming that I lost no time in examination, but immediately tamponed the vagina, with the effect of arresting the flow. No further hemorrhage occurring within two hours, the tampon was removed and the finger carried through the os, which, though rigid, readily allowed its introduction. I at once detected a presenting placenta, but in spite of the utmost gentleness of manipulation there came a sudden gush of blood almost as profuse as the first. A portion of the placenta had been torn away by my finger sufficiently large to admit it into the uterine cavity, when the hemorrhage at once ceased. The ovum must have escaped in some of the numerous clots discharged. I gave ergot in full doses, but without further detachment of the placenta. The os was not dilated sufficiently to admit two fingers, and with but one finger I found the removal of the placenta impossible. The case was therefore left to nature, but closely watched. On the fourth day the placenta came away in two small sloughs. On the fifth day the patient had a severe chill lasting about three hours, followed by high fever, some tympanites, and the usual septic symptoms. One dram of quinine given in doses of ten grains every three hours, together with four compound cathartic pills, arrested promptly and much to my surprise these dangerous symptoms. The patient stated that it had been two months and ten days since her last monthly show. She is now (November 10th) convalescing.

PEMBROKE, KY.

PREVENTION AND TREATMENT OF MAMMARY INFLAMMATIONS AFTER DELIVERY.*

BY W. H. TAYLOR, M.D.

Of the non-fatal complications of the puerperal state there is none which occasions more suffering to the patient or more annoyance to the physician than the various forms of inflammation of the breast, and it is probably equally true that there is none of which the treatment has been more unsatisfactory. Prof. Kehrer, of Giessen, has recently said that the conditions referred to are twenty per cent more frequent in city than in country, owing to the thin skin, the badly-developed nipple, and the smaller quantity of milk in the women of the city. A condition which, according to Kehrer, is found in about sixteen per cent of all cases of delivery, within a week after confinement, is the existence of one or more small fissures upon the nipple. Writers have classified these fissures according to their forms, as abrasions, excoriations, fissures, eczema, etc.; but believing that these various shapes are accidental varieties of one lesion, I regard such subdivision as of little practical value.

The *cause* of the lesion is the child's sucking, in which act the child compresses the nipple between its tongue and the roof of the mouth and draws it into the mouth, thereby subjecting it to firm compression and tension, whereby the epithelium is abraded and minute fissures formed. As this process is repeated at brief intervals, no opportunity for repair is afforded, but at each successive period of sucking the laceration is enlarged. From the intense pain experienced by the mother the flow of milk decreases; the child consequently makes greater suction effort, with corresponding injury to the nipple; so that it is not rare to have the child vomit small quantities of blood which it has drawn from the abrasions. The act of suckling is so exceedingly painful to the mother that it is postponed till the distension of the breast with milk compels her to submit to its

* Read before the Tri-States Medical Society, November 10, 1880.

being performed. The long-deferred nursing, the traction by the child's mouth, and the diminished flow of milk tend to increase the amount of blood in the gland, causing engorgement, an early stage of inflammation. The maternal heroism which prompts the mother to persist in nursing her child at such sacrifice of her own comfort, commendable though the spirit be, is fraught only with evil; for the conditions detailed are aggravated till the changes are such that suppuration of the gland is unavoidable.

Although we must recognize other influences—for example, cold, contusions, epidemic influences—as potential in the production of abscesses, yet I have sketched the most common history of such production.

The *treatment* of the fissures described is usually unsatisfactory. Medical literature shows a countless array of applications for sore, chapped, cracked, fissured, ulcerated nipples; and all, in my opinion, are of but little value; for, however great the remedial power of the application may be, it is rendered entirely nugatory by the sucking of the child, by which the fissures are necessarily torn open, so that whatever progress may have been made toward healing is undone each time the child is applied to the breast. With such opinions of the causation of fissured nipple but two means of treatment seem applicable; the first, the use of a nipple-shield, by which the nipple is protected to a considerable degree during sucking, is sufficient in mild cases, but is of little or no use in severe cases. The only remedy on which I rely, and which is adapted to all cases, is entire cessation from nursing with the affected nipple for from forty-eight to seventy-two hours, during which time the process of repair being uninterfered with by the child, healing will so far have progressed as to allow nursing with little or no suffering. Such suggestion usually awakens protest, on two grounds; first, that discontinuance of the use of the breast for the period mentioned will result in permanent cessation of the flow. While I can not deny its occasional occurrence, yet such result is exceptional. Usually the flow will be reëstablished in a short time after reapplying the

child to the breast. But even if the danger of such cessation were great, the treatment is still to be advocated, for we shall thereby probably avert suppuration, when nursing must necessarily cease and other evils increase.

The second ground of opposition to the advice given is that cessation from nursing will lead to accumulation of milk in the breast, and that such accumulation will result in abscess. That cessation from nursing will lead to temporary induration of the breast is a matter of daily observation. That suppuration is likely to result from this accumulation of milk alone I do not admit. I say from such accumulation *alone*, for I believe the means resorted to to overcome it often lead to the apprehended evil. To guard against the anticipated ill consequences of cessation from nursing it is usual to resort to artificial means for removing the milk from the breast. I am persuaded that from these efforts the evils are greater than from the accumulation of milk. When we remember that irritation of the nipple by the child's mouth is the natural means for exciting the secretion it is obvious that the effort to remove the accumulation by drawing the nipple is unphilosophic and will be unsuccessful. Again: the use of various mechanical appliances, breast-pumps, etc., is often productive of serious injury by contusing the portion of the breast compressed by the instrument, and may possibly induce abscess.

With such views of the action of these appliances I discard them entirely and forbid all effort to remove the milk by suction. That it is desirable to relieve the tension of the breast which occurs for a few hours after nursing has ceased, must be recognized by all. For such purpose I have the breast very gently stroked with the hand with camphorated oil, the movement always being from the periphery toward the nipple. The effect of such manipulation continued from ten to fifteen minutes will be to cause the milk to flow. I seek to divert the blood from the breasts and to deplete by giving a saline purgative. If the pain be severe enough to demand anodynes, I give Dover's powder, because it both relieves pain and relaxes the

engorged tissue. With such management the fissured nipples heal, and threatened abscess is generally averted. That such happy result is always obtained can be said of no plan of treatment.

When suppuration seems inevitable our only course is to hasten it, and while awaiting the progress of the case to mitigate the discomfort. As a very important means of relief I urge support of the breast by means of a broad bandage passed under the breast and around the neck. By this means we relieve the upper part of the breast and the skin over it of the continuous dragging sensation consequent on its increased weight, and also facilitate the return of blood from the breast, thereby lessening the engorgement of the breast. If this support does not relieve the pain sufficiently I administer opiates freely.

Dr. J. S. Parry, following McClintock, advises late opening of abscess of the breast, and I am inclined to adopt the practice. When discharge is effected, as perfect antiseptic dressing as possible should be applied. As soon after evacuation of the pus as the breast will tolerate pressure I resort to strapping, expecting thereby to prevent reaccumulation of pus, to obliterate the cavity and hasten union of the opposed surfaces, to compress the distended blood-vessels, thereby lessening the engorgement, and by the continuous pressure to stimulate absorption of effused material.

CINCINNATI, O.

COCK'S OPERATION FOR IMPERMEABLE STRICTURE.*

BY A. W. JOHNSTONE, M. D.

By reporting a case in which "Cock's operation" was performed, I wish to draw your thoughts to a method of handling impassable strictures which has not received the attention in America that in my opinion it deserves.

The patient on whom I operated is a strong and healthy mulatto of about thirty-eight years who has had urethral stricture since 1861. He has been treated at different times by surgeons in the army, in hospital, and at home. I saw him first in the summer of 1879 in consultation with Drs. Huffman and Mays, of Lancaster, Ky. After a prolonged attempt we succeeded in getting the smallest-sized filiform bougie through the main stricture, which was about an inch long and in the bulbous portion of the canal. There were several contracted places in the cavernous portion of the urethra, and a narrowed meatus. No part of the canal seemed healthy; all had a gristly feel. The stricture was so tight that Gouley's tunneled sound would not follow the guide, and as we had no other instrument at hand we were forced to give up the attempt to dilate.

I did not see the patient again until the December following, when I was called by these same gentlemen to do some form of urethrotomy. Assisted by them and Drs. McMurtry and Warren, of Danville, I examined the stricture and found I could pass no instrument whatever. As the stream had been coming only drop by drop for some time, and as our patient's strength was beginning to give way, it was evident that something must be done. Remembering the length and tortuosity of the stricture, we decided to tap the urethra behind it, after Cock's method, hoping at some future day to be able to pass a guide. This I did by passing the index finger of my left hand into the rectum and lodging it on the apex of the prostate; then taking a small

* Read before the Tri-States Medical Society, November 9, 1880.

bistoury and introducing its point in the median line about one and a half inches in front of the anus, with an up-and-down motion I carried it on toward my finger until I felt it just about to enter the prostate. I then turned it obliquely to my left, pushed it about a quarter of an inch further on, and withdrew it. I now took a grooved director and tried to guide it into the bladder with the finger that was still in the rectum, but failed. Fearing I had not opened the urethra sufficiently, I reintroduced the knife and made the inner part of the incision a little further to the right. After being put to bed and sleeping for an hour the patient got up and passed a large, bold stream through the opening.

From that time he has had no difficulty in passing his urine through the new passage, and with the exception of a little trouble at first with urethral fever and since then with redundant granulations he has progressed satisfactorily and has for some time been able to attend to his duties at the barber's chair. By his failure to use the bougies as directed the new opening at one time contracted below the point that we wished it to, but a seatangle tent soon restored it to a respectable caliber. He is so well satisfied with his condition that I doubt whether he will ever allow internal urethrotomy to be done; but even if he should not, his present state, though sterile, will not be a hard one to bear, for, as Mr. Cock expresses it, the man's micturition is merely assimilated to that of the other sex.

Those who have followed this clinical history are now ready to see how this operation takes the place in urethral surgery that lumbar colotomy has in intestinal. It would be out of place for me here to draw a parallel between the dangers produced by an obstructed intestine and a blocked urinary tract. It is enough to say that unless their contents find an outlet death is sure to follow from both.

The first duty of the surgeon is to save life, and only after that is assured is he to take conservative measures into consideration. So the first test of every operation must be its safety. The friends of Cock's procedure claim for it the safest place

among all the methods of opening an obstructed urethra without a guide. The dangers incident to the old operation justly won for it the reputation that Gross gives it, "that of all the operations in surgery this is the least to be coveted." Wheelhouse, Gouley, Teevan, and others have improved the instruments and operation so much that it is far more successful than it formerly was; but who is there today that can begin this operation on an old gristly stricture with a feeling of security? So far as I know, there has never been published a complete list of statistics of the old operation, and consequently we are not able to let figures speak on the comparative results of the two; but we are sure from the tone that those surgeons use who have tried Cock's method that it has been more satisfactory in their hands than the old one. Bryant says of this operation, "I have seen Mr. Cock frequently perform it. I have done it myself on many occasions, and have no hesitation in strongly recommending it as *the* operation for external urethrotomy without a staff. . . . I have described fully this admirable operation in the words of its originator, and believe it to be the only form of perineal section that ought to be performed in an impervious urethra. It is not sufficiently known."

Mr. Teevan, in the Lettsomian lectures for 1880, says that "the method known as Cock's operation ought to be performed for retention or for those cases of impassable stricture where the patient is too weak to undergo a prolonged operation;" but he thinks that the old operation, as improved by Avery, Wheelhouse, Gouley, and himself, is the one that should ordinarily be done. In the discussion of Sir Henry Thompson's paper on the Treatment of Stricture of the Urethra, at the last meeting of the British Medical Association, the procedure is highly spoken of by Mr. Clement Lucas.

In but a single place only in our home literature have I found this operation described, and that in Bumstead, edition 1879. On page 316 of that work are very clear directions for the performance of the operation, but the author evidently is either not familiar with it or does not appreciate its value, for he describes it

as a method for the *relief* and not as a permanent cure of retention. That this operation gives permanent cure, is proved by Mr. Cock, who says, "I have now under my frequent observation two men, on one of whom I operated twenty-five years ago, and the other twenty, and they are both thankful for their condition."

It is true that, like all other canals lined with new connective tissue, there is a tendency to contract; but so also in an urethra that has once been strictured, no matter what the method of treatment, it is almost sure to recontract; and as it is far easier to manage a straight two-inch canal than a curved six-inch one in the "bummer" element of society, where we find the greatest neglect of strictures and the least desire for fertility, I am not sure but that we would do them a service to change the direction of their streams and place their strictures where they can manage them with greater ease.

The ultimate aim of this operation, however, is not simply a new permanent opening. Like lumbar colotomy, it gives an easy and painless outlet to the contents o its own tract before they reach the diseased parts, which can be kept open as long as the need exists. But, unlike lumbar colotomy, it is not a dangerous operation. It preserves intact the last sphincter, thus leaving its tract under control of the will; and last, whenever the necessity for it is removed, the new opening closes of its own accord.

In no place do we find a better illustration of the value of rest than in an urethra narrowed by inflammation. This principle, however, was long since made use of in the various methods of tapping the bladder; but when Cock's perineal section is thoroughly appreciated I believe that with a few exceptions tapping the bladder for strictures will be a thing of the past. The section is not much harder to do, and is equally as safe as tapping through the rectum; and there certainly can be no comparison between the conditions after the two operations; for nothing could be more disagreeable than to have a tube lying in the bowels for ten days or two weeks. But with the section after the smart of the first few passages of urine there is little or

no inconvenience; but, what is better still, with the section we feel sure of an opening not only as long as the inflammatory thickening lasts, but if all subsequent operations should fail to restore the caliber of the old canal we feel sure that the one we have made will answer all absolute demands for a lifetime. So if you wish to get relief for a longer period than a day or so (which an aspirator will furnish), Cock's operation is always the one you should select.

The question, Can we always do this operation? might here very properly be asked. Is not that portion of the urethra at which it aims sometimes closed by stricture as well as the portions anterior to it? These queries I had best let Mr. Cock answer for me. He says, "However complicated may be the derangement of the perineum, and however extensive the obstruction of the urethra, one portion of the canal behind the stricture is always healthy and often dilated, and is accessible to the knife of the surgeon. I mean that portion of the urethra which emerges from the apex of the prostate—a part which is never the subject of stricture, and whose exact anatomical position may be brought under the recognition of the finger of the operator."

Among the many cases spoken of, I find but one in which the operation failed to relieve the retention, and that was a case of traumatic stricture reported to the Clinical Society of London on October 25, 1878, by Mr. H. G. Howse. The reason that he gave for the failure was, that the contraction of the scar had displaced the urethra from its normal position. Such cases as this, however, must be extremely rare.

The cases for whom this procedure should be chosen are: First, those where rectal tapping used to be practiced to relieve the retention from stricture; second, cases of impassable stricture of the bulbous or membranous urethra (by impassable I mean those cases that have resisted the repeated efforts of the surgeon, assisted by all the improved methods, such as rest in bed, filling the canal with oil and with a tube filled with filiform bougies); third, strictures anterior to the scrotum, for which

neither internal nor external operations can give relief, should be tapped at the point already indicated.

It may seem strange that I apparently exclude the Wheelhouse operation on the perineum; but when you see that Cock's method is far the surest, and that when Wheelhouse's operation is done first it disturbs the landmarks in such a way as to make it uncertain whether it can be done at all, I believe you will agree with me in thinking that Cock's method should always be practiced first. It does not interfere with any operation that you may wish to do afterward. If there is a necessity for restoring the caliber of the old canal, and the rest that Cock's operation gives it does not enable us to slip a guide into the bladder, we may practice the Wheelhouse, Gouley, or any other improved external urethrotomy, with the certainty that even should we be unable to trace the old urethra we already have a safety-valve that will rob it of its wonted dangers.

DANVILLE, KY.

[The operation known as "Cock's," and which consists in "tapping the urethra at the apex of the prostate, unassisted by a guide-staff," was first brought fairly before the profession in 1866 by its author, Edward Cock, Esq., then Senior Surgeon to Guy's Hospital. For full description of the manner in which it is done, see Bryant's Surgery, Gouley on Diseases of the Urinary Organs, Braithwaite's Retrospect, 1866, etc. Bryant is correctly quoted by Dr. Johnstone, but he also says Cock's is a more difficult and dangerous operation than Syme's, being called for in severer cases where the urethra is impervious.—D. W. Y.]

FOREIGN CORRESPONDENCE.

My Dear Yandell: LONDON, December 15, 1880.

I must begin my letter by taking the usual Englishman's privilege of a grumble at the vagaries of our climate. Any thing more erratic than the present proceedings of the clerk of the weather it would be hard to imagine. We go to bed at night with the thermometer showing four degrees of frost, and with a comfortable conviction that a severe winter is fairly upon us; we awake with disgust in the morning to a drizzling rain, a thermometer at 52° F., and a generally relaxed and listless condition of mind and body. To these violent changes of temperature, as much as to the choking fogs, is due the now universal custom among medical men of sending the delicate or aged to Algiers or the Riviere for the six colder months—a banishment which, I fear, is often inflicted without due consideration of the atmospheric peculiarities of the spot selected, and too often produces any thing but the desired effect. What can be greater folly, for instance, than to send a phthisical patient to Nice? The brilliant sunshine and the glorious blue sky entice him out of doors, and then the piercing wind swoops upon him and clings round him, nor will any heavy cloak or flannels keep it out. On a future occasion I may perhaps have more to say on the subject of European winter resorts, but just now there is "metal more attractive" for most of your readers.

Much attention has been excited lately by the numerous deaths from chloroform. Within the last ten weeks eight deaths from chloroform have been recorded in the British Medical Journal, and seven of these have occurred in Great Britain. Very welcome therefore is the news that an important addition has been made to our list of anesthetics by Dr. Lauber, Privatdocent in the University of Jena. Like chloroform when first used, the two substances experimented with by Dr. Lauber are not new, but have been known since their discovery and isolation by Regnault in 1840. They are isomeric bodies, rejoicing

respectively in the names of monochlor-ethy*liden*chloride or methyl-chloroform and monochlor-*ethylen*chloride.

Methyl-chloroform is a fluid of 1.372 specific gravity, having an odor like that of chloroform, and boiling at 167° F. A dose of forty to fifty drops, administered to a dog of about twelve pounds' weight, produced complete anesthesia of nineteen minutes' duration; while a dose of about twenty grams, administered to Dr. Lauber by Dr. Von Langenbeck, produced complete anesthesia in five and a half minutes, lasting ten minutes. There was no stage of excitement; respiration was quiet; the pulse was 84, regular, and of good tension. There was no reflex following stimuli, such as pricking with a pin, pulling out hairs of the beard, etc. Vomiting occurred shortly after the return to consciousness, caused, no doubt, by his having breakfasted shortly before; but beyond a feeling of malaise for about an hour he had no other discomfort, and at 6 o'clock was able to make his usual dinner.

The second product, bearing the formidable name of monochlor-ethylenchloride, gives even greater promise than methyl-chloroform. It is a fluid of 1.422 specific gravity, having the odor of chloroform, and boiling at 239° F., and formed either by the action of chlorine on ethylenchloride or of chlorvinyl on perchloride of antimony. Dr. Lauber found that a few drops administered to frogs, guinea-pigs, or rabbits produced rapid and complete anesthesia, with, even in the deepest narcosis, only the slightest diminution of respiration and frequency of pulse. Complete anesthesia, lasting from ten to twenty minutes, was induced in dogs of ten to fourteen pounds' weight by a dose of thirty to fifty drops. In one case the pulse rose considerably; in three others it rose slightly; but in no case was there a fall; while the respirations were increased or very slightly diminished in frequency.

The high boiling point and easy decomposition of monochlor-ethylenchloride by potash, combined with the speedily-occurring and rapidly-passing anesthesia produced by it, led Dr. Lauber to attribute the effects to its component dichlorethylene, which boils

at blood-heat; that is, for this substance he would grant the component action denied on chemical and clinical grounds to chloral-hydrate. Further experiments are promised by Dr. Lauber on man, and more especially with the latter substance. Their result will be awaited with great interest, for it is impossible to overestimate the importance of the discovery, or rather of the practice, as these substances have been known for some time. We are slow in this country to avail ourselves of new ideas, even in surgical matters, owing, I suppose, to our naturally conservative tendencies, and only the strongest facts brought repeatedly before us will overcome the force of habit and prejudice. But it is to be hoped that if the results of Dr. Lauber's forthcoming experiments are satisfactory monochlor-ethylenchloride may speedily take its place among the anesthetics in constant use, when no doubt a shorter if not a more euphonious name may be found for it.

You may perhaps be interested to hear of a new departure in the treatment of purulent ophthalmia. Mr. Bader, Ophthalmic Surgeon to Guy's Hospital, read a paper on the subject before the Ophthalmological Section of the Medical Association meeting at Cambridge, since which I have taken an opportunity of personally viewing his mode of treatment. It consists in the application to the entire conjunctival surface of an ointment of one grain of the nitric oxide of mercury, one fifth of a grain of sulphate of atropia, and one dram of vaseline. When the ointment is applied the patient lies down, and if restless is put under the influence of an anesthetic. (I fear chloroform is used for this purpose, but nitrous oxide would certainly answer.) Next—the eye being well cleansed from discharge with tepid water—with a large soft camel's-hair brush the ointment is freely pushed beneath the upper and then the lower eyelid, so as to touch the entire surface of the conjunctiva. As long as the eyelids are swollen this operation is repeated three times each day, but when once the eyelids open freely one application daily suffices until the cessation of the discharge. Previously to each application of ointment the discharge is washed away with tepid

water. If only one eye is affected, then the non-affected eye must be kept bound up with lint thickly covered with ointment, to be changed every morning, and to be continued until the other eye is well. Mr. Bader says this treatment has had the best results, not only in the case of adults, but also in that of children (aged three, four, and six) suffering from gonorrheal ophthalmia; but it is especially successful when adopted at the very outset of the disease. Mr. Bader says the ointment should be applied by the medical man himself. At Guy's Hospital, however, this would of course be impossible; at least without the special permission of the matron, treasurer, etc.

By the way, apropos of Guy's Hospital, the resignations of Dr. Habershon and Mr. Cooper Forster have been sent in and accepted, while Dr. Hilton Fagge and Mr. Davies-Colley, respectively senior assistant physician and surgeon, have been elected to fill the vacant visiting officers' places. The posts of these assistants, however, rumor says, will not be filled up, owing to the necessity the hospital is under of closing some more of its wards. It is currently reported that this institution, which has already been obliged to close one hundred and eighty beds to the public, in spite of its income of forty thousand pounds per annum, is still further deficient to the tune of ten thousand pounds on the results of the year's operations. A strange but sad commentary this on the late expenditure over the treasurer's house and chapel.

The antiseptic system of surgery, sometimes spoken of as "Listerism," has, after a struggle, struck deep root in Paris, where are now some of its most ardent champions. During the three months' absence, for holiday, of Monsieur Richet, Surgeon to the Hotel Dieu, his place was filled by a Monsieur Richelot, a professor of the Faculty of Paris. The latter employed the antiseptic system of dressing and operating under the carbolic spray to a great extent, and the remarkable successes which he achieved made a very deep impression on those who were able to contrast the results so obtained with the surrounding state of things.

From Paris also comes an interesting little note on the treatment of obscure cases of sterility. Dr. Charrier calls attention to the fact that many women who appear quite healthy and have their genital organs normal, and are married to healthy husbands, remain sterile. He suggests that this sterility is caused by an acidity of the vaginal and uterine mucus, as may be shown by litmus paper; and he considers this condition an absolute bar to conception, as the spermatozoa are quickly killed by the acid fluid. By treatment with alkalies, in baths and drinks, such as Vichy water, and alkaline injections (one thousand parts of water with ninety parts of sulphate of soda and one part of white of egg) the disease is removed and conception follows. This, he goes on to say, explains the incomprehensible results and strange successes following the use of alkaline springs in sterility. He gives several successful cases, and Professor Pajot, an eminent authority, has expressed his agreement with the theory.

A curious and interesting monstrosity is now exhibiting in London in the shape of twin female children of the famous two-headed Nightingale type. Their names are respectively Rosalie and Josepha Blazet, and they were born at Skrejchow (district Mühlhausen) in Bohemia. The mother and father accompany them; they are both well-formed, intelligent people, and were at first much shocked at the extraordinary appearance of their offspring. This feeling has, however, now entirely disappeared, for the children seem in a fair way to bring their parents a handsome fortune. Dr. Augustus Breisky, of the University of Prague, has written the following description of them, which I will give *in extenso:* "The rare deformity of these twin sisters consists in a junction of the posterior walls of the pelvis similar to that of the well-known Hungarian sisters Helena and Judith, and probably to that of the two-headed Nightingale. They may be defined as Pygopagi. Their development corresponds to their age, and they were well fed at the time of my examination. The distinctly separate formation of each child is manifest; sometimes one sleeps while the other is awake, and the voluntary movements and also the reflex movements on mechanical irritation of the

skin of the lower extremities are separate in each individual. In accordance with the junction of the two pelves the lábia pudendi majora are united, as well as the genital and anal apertures. The seemingly single urethral orifice s situated beneath a small elevation or fold, originating from a junction of the rudimentary labia minora, and corresponding to a median preputium clitoridis, from which on both sides short labia minora proceed. I have not sounded the urethral orifice, but I have seen urine flowing from it. Beneath it are situated the vaginal orifices lying close together and separated by a longitudinal septum. These again are separated by a narrow perineum from a single lenus. Remarkable besides in these girls is the singular asymmetry of the skulls, which strikes one both in viewing the cranial ovals from above and in viewing both heads, held upright, from behind. Viewed from above the ovals appear flattened on their apponent sides in the anterior circumference of the skull, and strikingly prominent behind. Seen from behind in a vertical direction the flattening of the apponent parts of the skulls is most striking. The children were born, with the assistance of a country midwife, on the 20th of January, 1878, of a mother twenty-two years old, who two years previously had given birth to a healthy girl. Rosalie was born first, with the head foremost. After the expulsion of the upper part of her body an impediment occurred in the process of parturition. The midwife now by strong traction delivered the four feet of the children and the pelvis. After this the upper part of Josepha's body followed, and finally her head. When the medical man who was sent for arrived the birth had been completed. The after-birth came spontaneously, and was not examined. The child-bed of the mother took a normal course."

I saw the little people the other day. They are extremely good-looking children, with bright, intelligent faces, flaxen hair, and pale complexions. They scuttle about the room in a very amusing manner, reminding one of the gait of a crab. One is now decidedly more strongly developed than the other, and is evidently mistress of the situation, as she rather drags her weaker

sister about, who follows her not always willingly. In my presence there was an amusing struggle, as two persons were calling the children from two different sides of the room, and eventually the weaker was dragged off, much to her disgust. They will be exhibited shortly at a meeting of the Obstetrical Society by Dr. Playfair, when a careful examination will be made of them.

Some most admirable charitable work is now being done in London in rather a new direction. A society has been formed called the "Kyrle Society," the members of which devote themselves to providing instruction and suitable recreation for the poor, while a section of the society has for its object the acquiring of open spaces for the public benefit, by laying out and throwing open disused and neglected graveyards and other gloomy and depressing spots. A great feature of the society is that choirs are formed among the members, who get up part-songs and glees, which they render in a most charming manner. They are thus able to provide admirable concerts for the unfortunate inmates of hospitals and work-houses, and so much appreciated are their efforts in this direction that the applications lately received by the society have been in excess of their powers. A large reinforcement of new members has, however, just joined, and they will soon be able to give pleasure to hundreds of poor creatures who know little enough of the brighter side of life. The society has lately painted and decorated some wards in the Westminster Hospital in the modern style of art, and the general effect is most delightful, nor can it fail to have a cheering effect upon the patients located there. Moreover, it is the intention of the society, as their resources permit, to visit the various hospitals, and with the permission of the authorities to paint the walls and ceilings of the various wards in a way calculated to have a refining influence upon the tastes of the poor sufferers.

I fear my letter has been a very rambling one, but there is so much to tell, and I have jotted down the points one after another as they struck me as likely to be interesting to you and your readers.

Reviews.

A Practical Treatise on Surgical Diagnosis, designed as a Manual for Practitioners and Students, by AMBROSE L. RANNEY, A.M., M.D., Adjunct Professor of Anatomy and late Lecturer on the Surgical Diseases of the Genito-urinary Organs and on Minor Surgery, in the Medical Department of the University of the City of New York, etc. Second edition, enlarged and revised. New York: Wm. Wood & Co. 1880. 8vo. Pp. 471.

It must be either a low number published or a very popular work when a first edition of a medical book is exhausted within fifteen months of its issue. Perhaps a discreet author, anxious to please and be useful, but not quite sure of his ability in that rôle, might prepare a book and have published a limited supply, the reception of which would give him a measure of the demand for his mental offspring, and the criticisms it would excite would indicate to him whether it was already perfect or needed emendation, and in the event of the latter would also index the nature of the improvement called for. Quick editions of medical books are always a mystery to the unsophisticated, but are known to be sometimes the occasion of much improvement.

Dr. Ranney intimates that in the fifteen months since the first edition of his Surgical Diagnosis was published his mind has undergone something of a revolution in regard to the plan and matter of his book. He has accordingly in this second edition modified the plan, increased the number of pages about one hundred, and expunged the errors of statement of the first edition, and claims to have incorporated all the improvements that he recognized as such pointed out by critics.

The present edition will be found a desirable addition to the surgeon's library; a book that the young practitioner will often realize pleasure and consolation in consulting, and the advanced student find a serviceable source of instruction. The general

plan of the work is that of tabulating the symptoms of diseases in such wise that they may be read in one direction as a continuous statement of the disease in hand, and in another way as contrasting the features of similar diseases as a ready means of diagnosis. This is accomplished by the familiar method of occupying the page by vertical half columns of symptoms of two diseases it is the purpose to present and differentiate, which allows the observer to read either half-page column *down* and get the connected symptomatology of one disease, and by reading *across* the page obtain the contrast of symptoms for diagnosis of two diseases. Dr. Ranney's complete tabulation of this kind is, here as elsewhere, striking and valuable. At the close of each table of contrasts, where there is material for it, there is added a table of symptoms common to the contrasted diseases, which is an instructive finish to the larger table of contrasts, and necessary to a complete presentation of the symptoms of each disease.

Beside these tables the author in this edition of his book gives "a concise and general enumeration of the etiology and symptomatology of the more important diseases to which the attention of the surgeon is most often directed."

Dr. Ranney divides his treatise into eight parts. These are: diseases of the blood-vessels, forty-seven pages; of the joints, forty-nine pages; of the bones, thirty-six pages; dislocations, fifty-four pages; fractures, sixty-seven pages; diseases of the male genitals, seventy-eight pages; of the abdominal cavity, forty-five pages; and of tissues, eighty-five pages. As an introduction to the presentation of the surgical diseases of tissues the author devotes fifteen pages to the phenomena of inflammation in general, summarizing the various theories of it, and making a fairly successful effort to convey the present status of professional knowledge in this exceedingly important pathological process as it is manifested in its sundry forms and in divers situations. Of course in so brief a space only the merest outline can be given, but that may be sufficient to call the serious attention of the surgeon to this item of his schooling, often so imperfect; and the effort will not be without value if it impress him with the neces-

sity of a more thorough study and a better understanding of this almost universal and protean departure from normal vital activity, the means to do which are made sufficiently plain in the volume.

A pretty full bibliographical record follows the teaching text, and an extensive and admirable index fitly closes the work.

The publishers have done their work neatly and well.

J. F. H.

A Treatise on Diphtheria. By A. JACOBI, M.D., Clinical Professor of Diseases of Children in the College of Physicians and Surgeons, New York; Physician to Bellevue, Mount Sinai, and the German Hospitals, etc. New York: Wm. Wood & Co. 1880. 8vo. Pp. 252.

An announcement of a book from the pen of Dr. Jacobi carries with it the expectation that it will be a good book; the announcement that Dr. Jacobi has written a treatise on diphtheria leads at once to the conviction that it will be found exhaustive, temperate, and practical, for he has been all his professional life a student, for twenty years a thoughtful writer on diphtheria, and for even more years an attentive practitioner in it and a careful observer of it. The perusal of the book will not disappoint those who anticipate a thorough handling of the subject so far certainly as material and design are involved.

After his preface, dated October 15, 1880, was printed he received the report of the experiments of Drs. Wood and Formad, made to the National Board of Health and printed in its supplemental Bulletin No. 7, touching the effect of diphtheritic poison on certain of the lower animals. Dr. Jacobi reviews so much of this report as relates to the subject-matter of his book and expresses his gratification that the conclusions reached by these investigators accord with the results of his own study and experience as printed in his pages before the publication of the labors of Drs. Wood and Formad.

A history of diphtheria is given in Dr. Jacobi's first chapter,

and this is followed by other chapters, one each on etiology, the manner of infection, contagion, and incubation, symptoms, anatomical appearances, diagnosis, prognosis, and treatment. At the end of each chapter is a summary of the chief points brought out in the text, making a satisfactory means of refreshing the memory of the reader as to the substance of the discussion.

It is not designed to make a full review of Dr. Jacobi's book, but it may be profitable to state that he ascribes a high antiquity to diphtheria, but claims that the modern phase and present name date from 1821, when Bretonneau read his first essay on the subject to the French Academy of Medicine, that diphtheria is preëminently though not exclusively a disease of childhood; that he supposes the contagious matter to be chemical, not organic; that bacteria appear in the diphtheritic humors as an incident, not as a cause; that one attack not only does not prevent a second but rather invites it; that no violence nor number of the attacks exhausts the liability to diphtheria; that in some cases the disease is decidedly local, in others the blood is first poisoned through inhalation; that it is very contagious; that the period of incubation is from two days to two weeks; that its duration is uncertain; that symptoms vary with the part affected; that the fauces most frequently suffer first locally, but the nasal cavities are often early involved and wounds are especially rapidly infected; that all parts of the system may suffer from local or constitutional diphtheria; that sequelæ are sometimes more serious than the original disease; that two morbid anatomical conditions exist, a pseudo-membrane on the surface and an infiltration into normal tissue, and these may exist separately or together; that the membrane is the characteristic that distinguishes diphtheria; that the mortality is not high, but the uncertainties in every case are such as to forbid a positive diagnosis; that there is no specific treatment, but both local and general medication must be founded on the special conditions present; that the membrane must not be torn off nor even removed unless nearly detached; that laryngeal diphtheria is fatal unless relieved by tracheotomy, and this is so rarely successful that it is

to abate the suffering of the patient rather than the hope of cure that drives the author to do the operation; and that this is his position after doing two hundred and sixty-seven operations. The foregoing is intended for a mild syllabus of some of the salient points of Dr. Jacobi's teaching, selected from his several chapters.

Both the experience and the reading of the author concerning diphtheria have been liberal, and he has made such use of his material in the preparation of this book as will doubtlessly establish for it high rank as an authority in the sphere of its subject, and it can be conscientiously recommended to all inquirers as a reliable source of serviceable information; but one can not commend it as without defects or blemishes. The style is somewhat diffuse, not satisfactory in the attribute of clearness, and the language is not at all points devoid of carelessness in selection. For example, the author quotes liberally and fairly *pro et con* the identity of diphtheria and croup, but leaves one to arrive at his own conclusion in the premises only inferentially. Page 157, he says young children begin to improve immediately when their one hundred grams of brandy per day are increased to four hundred grams daily, and on page 231 he says alcohol must be used freely, from two to twelve ounces daily, referring to the preceding page for confirmation. Now there is a great difference between alcohol and brandy, to say nothing of the language in one place specifying young children—a very indefinite term itself, and in the other making no specification of age, which should signify adults. There is nowhere in the volume any attempt at giving the natural history of diphtheria, which is a serious defect in the light of the knowledge and needs of the present day, but by implication we are led to infer that all good endings of diphtheria are due exclusively to the medication, a lesson unprofitable or worse to inculcate at least in the minds of the student and young practitioner.

The volume has a full and satisfying index, and Wm. Wood & Co. have filled the rôle of neat and tasteful publishers.

J. F. H.

A Treatise on the Diseases of the Eye. By J. SOELBERG WELLS, F.R.C.S., Doctor of Medicine of the University of Edinburgh, Professor of Ophthalmology in King's College, London; Ophthalmic Surgeon to King's College Hospital; Surgeon to the Royal London Ophthalmic Hospital, Moorsfields. Third American from third English edition, with copious additions by CHAS. STEDMAN BULL, A.M., M.D., Surgeon and Pathologist to the New York Eye and Ear Infirmary, Lecturer on Ophthalmology in Bellevue Hospital Medical College. Illustrated with two hundred and fifty-four engravings on wood and six colored plates, together with selections from the test-types of Professor E. JAEGER and Professor H. SNELLEN. Philadelphia: Henry C. Lea's Son & Co. 1880.

When the first edition of this classic volume appeared in America it was pronounced by a reviewer, who was competent to judge, to be the best work extant on diseases of the eye. It is safe to say that this the third edition warrants the same high praise. There is really no work which approaches it in adaptation to the wants of the general practitioner, while the most advanced specialist can not rise from a perusal of its ample pages without having added to his knowledge. The American editor, Dr. Bull, won his spurs in ophthalmology some time back. His additions to the work of the lamented Wells are many, judicious, and timely, and in just so much have added to its value. The publishers have issued the volume in a style in keeping with its contents.

The Medical Record Visiting-List for 1880. New York: William Wood & Co.

This is a very handsome pocket record; the gilt edges, the fine paper, and especially the variegated ruling, making it very attractive. This is the first year of publication. It contains all that is necessary for properly recording professional visits, besides a posological table, the metric system, poisons and their antidotes, etc.

Clinic of the Month.

TREATMENT OF SPRAINS BY MASSAGE.—Dr. Bérenger-Féraud gives an account of four hundred sprains which he treated successfully with massage. He speaks as follows:

Let us suppose that we have a sprain of the foot. After we have arrived beside the wounded—and note in beginning that the nearer massage is to the moment of the accident the shorter the treatment—set him upon a chair if he is up; seat ourselves in front of him; and put his injured foot upon our knees. If the subject is lying down uncover him and make a diagnosis. The diagnosis being established—that is, when we have found out that we have to do with a sprain, slight, medium, intense, or complicated—we proceed to the manipulations. Begin by making, on the dorsal face of the foot, going from the root of the toes to the leg, following the direction of the extensor tendons, passes as light as possible with the pulp of the four last fingers, anointed from time to time with some fat body—olive oil, for example. These frictions, which ought always to be directed from the extremity toward the root of the limb, and never in a contrary direction, are extremely light; they begin quite far above the painful part, and are prolonged as far below. They ought not to be painful; and in the cases in which, in spite of their extreme slightness, the subject finds them too painful, it will be necessary to begin at some other region, leaving the dorsum of the foot to return to it when the sensibility has been a little blunted by the massage.

Little by little the pressure is augmented, and at first the pulp of the four last fingers of both hands, then that of the two thumbs, intervene, according as the contact is less painful for the patient. A few minutes after beginning, in general, one may press very notably on a place which at first could not support the slightest friction without suffering. Soon after it is a veritable friction, quite strong, that we may practice, taking care to have recourse to the fat body to protect the skin of the patient, which would not be slow to become excoriated if it were kneaded dry, and the pulp of the fingers feels a sort of peritendinous edema which one makes mount upward little by little above the ankle, as far as the fleshy portion of the extensors of the toes and of the anterior tibial.

According as the contacts are less painful, we cause slight movements to be executed upon the articulations in the neighborhood of those which are in ured, and one arrives thus little by little at those in which the sprain has spent most directly its effects. These movements are very gradual; imperceptible at first, they go on, little by little, increasing until at the end of the *séance*, which it is necessary to prolong willingly, pain being always very carefully avoided, we cause the part to execute all its physiological movements in their greatest amplitude.

At certain moments we may feel under our fingers substances like small nodosities, more or less voluminous, large as a lentil—nodosities at first fixed, afterward movable, of which the patient is conscious, and which give an impression of pain when pressed a little forcibly. It is necessary to pass the fingers with persistence over them, taking care to do so lightly enough not to make the patient suffer; and moreover they must be mobilized little by little—at first chasing them very gently, afterward as far as the fleshy portions of the extensor muscles of the toe and the tibialis anterior.

At the end of a time which varies from one to five minutes friction may be applied with greater and greater force, and soon strong pressure provokes no sensible pain. This is the moment to leave this portion of the foot to knead either the more external part or the internal part, by passing them along the border of the foot as far as the malleolus, which is turned in such a manner as to follow either the tract of the peroneal tendons or that of the muscles of the posterior tibial region. We act upon each of these regions, as I have said previously, going from the lightest rubbing to vigorous friction, taking as a guide the impressions made upon the patient, and taking great care not to hurtle against an osseous eminence.

The *séance* ought to continue until all feeling of distress and pain have disappeared. The operation terminated, a retentive apparatus is applied. (Canadian Journal of Medical Science.)

CYSTORRHAGIA.—To prevent the hemorrhage which is so likely to occur after retention of urine, Dr. Gouley in a recent clinical lecture recommends that an over-distended bladder be emptied very gradually. Draw off eight or ten ounces through a soft rubber catheter during five minutes, then wait an hour before drawing any more, and so continue even if twelve to fourteen hours are consumed in emptying the bladder entirely. If the urine is very offensive, draw off ten ounces and inject an

equal amount of warm water containing one scruple of biborate of soda. Then draw ten ounces of the contents of the bladder and again inject the solution, and so continue until the contents of the bladder are no longer fetid. Then proceed to empty it gradually, but never allow the over-distended bladder to be evacuated at a single catheterism. If cystorrhagia occurs Dr. Gouley recommends the following treatment: After all the urine has been drawn, introduce a soft catheter and leave it in the bladder for twenty-four hours, thus allowing perfect drainage. The drainage allows the muscular wall to contract firmly, and the contraction alone will stop the hemorrhrge in most cases. If the hemorrhage is severe and continuous it will be necessary to draw off the clots by suction made with an aspirator attached to the catheter. Before doing this inject a warm solution of borax and only withdraw the same amount that has been injected. As soon as the clots are removed the bladder will contract and the hemorrhage will cease. Injections of tannin or alum are only to be used as a last resort, as they may set up a general cystitis. The administration of the fluid extract of ergot by the mouth will aid in the arrest of severe hemorrhage, but is needless in mild cases where simple drainage will suffice.

A New Remedy in Diphtheria.—Dr. Guttmann, of Cronstadt, writes in *Berlin Klin. Woch:*

I prescribe pilocarpin in violent pharyngeal cases, angina aphthosa and tonsillaris, always with most happy results, the disease yielding in a short time. In two cases of violent tonsillitis, in which the tonsils were so swollen that water could be taken only with great difficulty and scarification was positively indicated, not only did the swelling disappear, but the entire group of inflammatory symptoms, the one in twenty-four hours and the other in thirty-six.

In the few cases of membranous croup that have fallen into my hands during the past fifteen months, pilocarpin has proved a faithful ally, and I believe it will prove as effective as in diphtheria of the fauces.

Two cases of laryngitis stridula yielded promptly to the same drug, which is safer and more convenient than the usually prescribed emetic.

Others have used pilocarpin under my advice, and agree with me

in maintaining its excellence in diseases of the nature described. In the administration of this remedy I combine pepsin to combat the gastric catarrh usually present. My formula is as follows:

℞. Pilocarpin muriat . . . . . gram 0.02—0.04;
Pepsin. . . . . gram 0.6 —0.8;
Acidi hydrochlor . . . . . gtt. ii;
Aquæ dest . . . . . grams 80.0.
M. Sig. A teaspoonful hourly for children.
For adults:
Pilocarpin muriat . . . . . gram 0.03—0.05;
Pepsin . . . . . gram 2.0;
Acidi hydrochlor . . . . . gtt. iii;
Aquæ dest . . . . . grams 240.
M. S. Hourly, a tablespoonful.

I have never observed any undesirable effects of the drug even when it has been continued until complete recovery, possibly because I give a small amount of generous wine after each dose. (St. Louis Courier of Medicine.)

Cold Pack and Massage in the Treatment of Anemia.—We extract the following from the recent work bearing the above title by Mary Putnam Jacobi, M.D., and Victoria A. White, M.D., and commend it as containing the best expression yet given on this most interesting subject:

The administration of iron in anemia encounters the following difficulties:

1. The frequent occurrence in anemic persons of gastro-intestinal hyperemia, which interferes with the absorption of iron, and is itself easily aggravated by its presence.

2. Ordinary food contains enough iron for the maintenance of the blood in health, but in anemia this ceases to be appropriated. Whatever hindrance exists to such appropriation, must be overcome before the excess, given therapeutically, can be taken up.

3. The construction of the blood corpuscles demands oxygen and albumen as imperatively as iron. To judge from the researches, now classical, of Quevenne, Miahle, and others, iron is mainly absorbed in combination with peptone and in proportion as it produces its primary effect of increasing the secretion of gastric juice and also the amount of peptone dissolved in it. But this effect is not unfrequently prevented, and can not be produced unless other therapeutic agencies are made to coöperate with the iron.

Anemia is a morbid state, characterized by an inability on the part

of the tissues to condense oxygen and to store albumen in sufficient quantity. The inability is frequently congenital, or acquired in early childhood. As a first consequence the reserve material required in the elaboration of force is every where deficient. As a second consequence, this elaboration of force is deficient—there is a generalized functional debility.

The atrophy of the blood corpuscles, or of their functionally active portion, hemoglobine, is not an isolated lesion, and alone characteristic of anemia. It must rather be considered as the most easily demonstrable illustration of a disorder common to all the organized albuminoids of the body.

The cold pack* meets the following indications for the treatment of anemia thus understood:

1. In the first moments of application it produces the same stimulation of the peripheric nerves as may be caused by any application of cold—shower-bath, douche, plunge-bath, etc.

2. It impresses upon the mass of circulating blood a profound movement of oscillation, first from without inward, then the reverse. The effect is different in the two periods.

During the inward movement of the blood the tension of the abdominal blood-vessels, which has at first been lowered through the agency of the depressor nerve, at first relaxed, becomes raised by the increased volume of blood driven to them, and circulating through the abdominal viscera, not with increased rapidity but with increased force. As a consequence there is:

a. Increased metamorphosis of albuminoid substances in liver and spleen, resulting finally in greater production of urea. When iron is absorbed with the albumen there seems to be initiated in these same glands more abundant regeneration of red corpuscles.

b. Increased consumption of stored or latent oxygen in the series of oxidations culminating in urea. Hence, during the period following the pack probably increased absorption of oxygen, coinciding with diminished oxidations. The latter are indicated by diminished production of urea. (Of carbonic acid also?)

c. Possibly increased movement of assimilation of now decomposed albumen (and other food), coinciding with the movement of increased decomposition, affecting that portion of circulating albumen which has originated the urea. Both movements immediately dependent on an increased force of elementary, intervascular circulation.

* Made by enveloping the patient in a wet sheet, this surrounded by a dry one, and that by six blankets, the whole drawn tightly around the body. The patient to be kept in this from thirty minutes to one hour.

d. Probable assimilation of the non-nitrogenous portion of the decomposed albumen.

e. Increased elimination of water from the kidneys, and hence, aspiration of excess of water from anemic tissues.

f. During this elementary outstreaming of water, facilitated washing away of acid fatigue-products from nerves and muscles.

This latter (calculated) effect to be attributed partly to the second half of the movement of oscillation of the blood mass. During this secondary movement from within outward, we have:

A. Diminution of passive hyperemia in the elementary mucous membrane.

B. Increased nutritive absorption, partly in consequence of allayed hyperemia, partly as the direct expression of a movement of fluids outward from the alimentary canal.

C. Afflux of blood to muscles, enabling them to increase their store of contractile material, and thus become more capable of exercise.

D. In this afflux, and on account of thermic irritation of the peripheric nerves, increased production of heat. From the coincident immobility of the body, and the arrest of radiation, a certain proportion of this increment saved. (The increment of urea is probably derived in part from increased chemical changes of circulating albumen in the muscles, during the production of heat).

E. In the production of heat in response to a physiological stimulus, the nervous system, through the portion involved in the reflex mechanism, is especially stimulated, and the stimulus is immediately followed by special provisions for repose.

F. During the afflux of blood to the periphery, blood is drawn from the nerve-centers, which are thus placed in a condition analogous to sleep—a condition favorable to repose and to nutritive assimilation. The establishment of an equilibrium of temperature is followed by a cessation of chemical activity in the muscles, and necessarily by sedation of the nerves. These effects are of especial symptomatic importance in irritable anemias.

3. During the pack the radial pulse is slackened and its tension lowered. We may infer increased facilities for nutrition in tissue-elements hitherto irritated rather than nourished by a blood stream imperfect in quantity and too rapid in duration.

Massage intensifies and prolongs some of the effects of the pack, when this has previously been administered.

Given alone it is much less effectual than the pack, because its influence is less complete, and especially because it is less certain to determine blood to anemic muscles.

In cases of "neurasthenia," or of hysteria, the cold pack is only beneficial in proportion to the coexisting anemia. If this is not marked in proportion to the neurotic element the pack may be useless or even injurious.

The cold pack is decidedly dangerous if administered too near to periods of abdominal hyperemia, whether physiological, as digestion and menstruation, or pathological, as in lurking peritonitis.

MORPHIA AND CHLOROFORM.—Prof. Bartholow in one of his recent Cartwright Lectures, thus speaks of the antagonism of morphia and chloroform:

As paralysis of the heart or of the respiration, or possibly by the simultaneous depression of both functions, is the mode of death from chloroform and other anesthetics, it is certainly very desirable that we should have an agent which will antagonize and prevent this fatal tendency. In the subcutaneous injection of morphia I am entirely convinced that we do possess such an agent; and it is a matter of great surprise to me that surgeons have not more generally availed themselves of the indisputable advantages of mixed anesthesia. It was about the same time that Claude Bernard and Nussbaum demonstrated the great utility of the method of inducing anesthesia by the subcutaneous injection of morphia combined with the inhalation of chloroform—Bernard administering the morphia a few minutes before commencing the inhalation, and Nussbaum not until the latter was well under way. Morphia and chloroform act on the same cellular elements of the brain, and agree in the production of anesthesia, but they are opposed in their action on other structures and organs—an opposition which renders their combined use safer. When morphia is injected before the inhalation of the anesthetic is begun (which is the preferable method on account of the manner in which it facilitates the latter), the irritability of the bronchial mucous membrane is so far overcome as to permit the inhalation to proceed quietly; the stage of excitement is prevented, and consequently the danger from asphyxia which sometimes accompanies this; the nausea and vomiting are also obviated, and the anesthetic effect is prolonged without the aid of further inhalation. In addition, the nausea and vomiting, after-pain and depression which follow the use of anesthetics, as well as the dangerous syncope which sometimes results, can be prevented to a great extent by this method. If the morphia and the chloroform inhalation be carefully and properly combined, it is possible to produce anesthesia without loss of consciousness, a point in regard to which Bossis says,

in his thesis on this subject, "There may be obtained in man with a little attention, by the combined action of chloroform and morphia, a state of complete insensibility to pain, with preservation to a partial extent of the intelligence, tactile sensibility, auditory and visual, and of the voluntary movements. From the practical point of view, the analgesia obtained by the combined action differs completely from the demianesthesia caused by the employment of chloroform or ether singly, in that it is not preceded or accompanied by a period of hyperesthesia with violent excitement, and the tendency to exaggerated reflex arrests of the heart and after-syncope."

From the practical experience thus far accumulated there can be no doubt that morphia, used after the method of Bernard, greatly facilitates the induction of anesthesia and materially diminishes its dangers. I have maintained that for this purpose atropia in combination with morphia should be preferred to morphia alone, on account of the greater stimulating effect thus produced upon the cardiac and respiratory centers. It might perhaps be supposed that atropia alone would be better than morphia; but it must not be forgotten that stimulation is inevitably followed by reaction, and morphia has a power of continued support which atropia does not possess. When administered together under the circumstances, the evil effects of both are antagonized, and the power of both to support the heart and respiration utilized. The quantity of morphia employed should rarely exceed one fourth of a grain, and of atropia one hundredth of a grain.

CATARRH OF THE NASAL PASSAGES.—At a late meeting of the New York Academy of Medicine a paper was read by Dr. F. H. Bosworth upon Catarrh of the Nasal Passages, which contained the following practical suggestions:

The douche affords only a slight degree of relief. The fluid flowing slowly and only over a small portion of the passages affected, does not reach all the hypertrophied and diseased mucous membrane, nor does it thoroughly cleanse it of accumulations. The atomizer enables us to make applications to the whole nasal cavity, and by its use we can control to some extent the morbid process, lessen the secretion, and arrest the disease if the case be a mild one. Powders of all kinds rank with the spray. But with neither is a permanent cure accomplished, as a rule. Topical medication to the hypertrophied membrane usually fails. In the use of destructive agents lies the only plan of treatment any permanent service. Forcible evulsion of the tissue is too painful and bloody. Chemical agents are therefore to be

used. Nitrate of silver, advocated by some, will destroy the tissue, but at the same time stimulates the parts beneath and sets up a further morbid action. Nitric acid, though free from stimulant properties, is liable to erode too deeply and cause ulceration. Chromic acid is not open to this objection. But of all the chemical agents I prefer glacial acetic acid. It destroys the superficial layer of hypertrophied membrane, and by its absorption seems to control the morbid activity of the deeper layers. It may cause irritation and swelling, but this rapidly subsides, and there are soon voided shreddy masses resembling croupous membrane, after which the symptoms subside. I apply the acid on a flat probe, wrapped in cotton wool, only one side of the probe being wet with the acid, so that the septum of the nose is untouched. The probe is swept through the nasal passages in such a manner that the face of the inferior turbinated bones is touched in its whole length. The application is painful, but the pain is instantly relieved by throwing in from an atomizer a spray composed as follows:

℞ Acidi Carbolici . . . . . gr. j;
Sod. Biboratis . } āā . . . . . gr. ij;
Sod. Bicarbonatis }
Glycerinæ . . . . . ʒj;
Aquæ . . . . . ad ℥j. M. (Dobell.)

This solution is also used as a cleansing agent before the application of the acetic acid, and is best applied by means of the douche. If the pain is not relieved by the spray, a solution of morphia may be applied with the atomizer. The application of the acid is to be repeated at intervals of a week, and during the interval the solution is to be used as a douche twice daily. As the disease succumbs to the treatment the interval may be extended to two or three weeks. By this means we can remove permanently most of the features which render catarrh a source of discomfort. In extreme cases, where the hypertrophied membrane forms projections from the turbinated bones and encroaches greatly upon the nasal cavity, the galvano-cautery or an écraseur of steel wire may be used to remove the tissue.

In the discussion which followed, Dr. J. H. Douglass expressed the opinion that catarrh was mainly a constitutional disease, and was to be treated as such, local applications being limited to the use of the douche, heat, and bland agents like vaseline. Dr. Andrew H. Smith said that the douche could be used very efficiently, and the stream would reach all parts of the nasal passages if projected with some force. He had used, in

treating these catarrhs, nitrate of silver in the form of powder, combining ten to forty grains with one dram of sulphate of potash and one ounce of subnitrate of bismuth. Such a powder could be blown into all parts of the nose and remain in contact with the mucous membrane. He considered acetic acid as too painful an application for general use. Dr. Asch had applied Dobell's solution as a cleansing agent, as all local applications were useless unless the mucous membrane was clean. He applied a solution of nitrate of silver (twenty to forty grains to one ounce of water) on a brush, and had been able to control most cases of catarrh by this means. Dr. H. Knapp thought it best to abstain from injuring the mucous membrane, and resorted to mild local applications daily for a long time, with good results, especially in children's cases. (Chicago Medical Review.)

THE ADMINISTRATION OF ANESTHETICS.—Robert Saundby, M.D., Edinburgh, M.R.C.P., late Chloroformist to the General Hospital, Birmingham, whose experience in the use of anesthetics has been large, thus sums it up:

It may be assumed that the anesthetic agents usually employed in practice are ether and chloroform. But these agents are neither satisfactory nor safe unless properly administered with due discrimination of the cases suitable to each. I shall try to state accurately what are the methods I use, the precautions I have found necessary, and the errors I have learned to avoid in the administration of anesthetics; and I hope by clearly enunciating my own views to raise certain questions in a definite manner, which shall be capable of being affirmed or denied, but at any rate must be answered.

The agent to be preferred. As a general rule I prefer ether, because I believe it to be safer, the public believes it to be safer, it is a perfectly satisfactory anesthetic, and its after-effects are less depressing than those of chloroform. The apparatus I employ is a towel folded lengthwise, with three or four thicknesses of paper between the folds, made into a cone by twisting it in one hand and fixing it with a few safety-pins.

Preliminary arrangements. No solid food should have been taken for at least three hours before the time fixed for the administration. I can recommend the plan proposed by Mr. Priestley Smith of admin-

istering a dose of chloral hydrate an hour before. Do not give brandy or any other stimulant just before administering ether; it is unnecessary, will probably be vomited, and introduces another factor into the conditions which we should try to keep as simple as possible. Examine the chest and make inquiries as to cough in all cases. Inflammation of the lungs or air-passages forbids the use of ether. The vapor of ether irritates healthy lungs, often to an excessive degree, and sometimes causes a slight bronchitis for a day or two, while occasionally it gives rise to fatal edema of the lungs, even where no previous disease existed in these organs. It is therefore plain that all inflammatory conditions of the lungs are likely to be made worse by ether. Chloroform is to be preferred in all such cases. Cardiac disease *per se* does not contra-indicate ether, as the drug aids a weak heart. In aortic incompetence with badly-filled arteries the circulation becomes better during the administration of ether. In mitral disease the case is somewhat different. It must be remembered that ether frequently causes spasmodic dyspnea, which ordinarily need cause no alarm, and calls for nothing but temporary suspension of the administration, but during which there is great venous turgescence, and the right side of the heart is necessarily overloaded with blood. So that whenever I have reason to believe that the right side of the heart is weak and dilated I should prefer chloroform to ether. The same would hold good of dilatation of the right ventricle apart from mitral disease.

Fractures, herniæ, and other conditions in which complete muscular relaxation is required are cases in which, *ceteris paribus*, I should use chloroform. Operations about the face can sometimes be performed only with difficulty, or not at all, while ether is being administered; in these chloroform must be employed. Young children take chloroform with such ease and safety that it is to be preferred for them.

Method of administration. The orifice of the cone should be large enough to cover the lower two thirds of the patient's face and take in the chin and lower jaw. Have the patient lying down with his shoulders a little raised, and his head not much higher than his shoulders; the pillow should be firm and flat; unfasten any thing that is round the patient's neck; ask him to turn his head with the right cheek on the pillow, to shut his eyes and mouth, to breathe through his nose; tell him to try and go to sleep, and assure him that the ether will be given him cautiously. Pour about an ounce of ether into the cone, and approach it slowly toward the patient's face; with a little encouragement he will soon submit to having it brought quite close, for partial anethesia is rapidly induced. When once it is close to his face it

should not be removed for some minutes, in spite of any struggles or protests. Fortunately patients rarely recollect what occurs at that time if the cone has been approached gradually. The ether should be given liberally, as atmospheric air is being excluded, and the patient is respiring nothing but ether vapor. Stertorous breathing is a sign that the patient is "over," and that the operation may begin. If there is much lividity, stop giving ether for a short time and the natural color will soon return. The ether must be given almost continuously throughout the operation. Stertorous breathing is not a warning of danger. On the contrary, I like to hear this noisy breathing, as I feel sure my patient is going on all right.

Cautions. It is absolutely necessary that one person should do nothing else but administer the anesthetic. He should never leave his post to assist or perform other duties. His business is to give the anesthetic and to watch the breathing. He should let his own breath, as it were, hang on the breathing of his patient, so that he can not breathe himself till his patient breathes. In this way he will be able to detect the slightest irregularity. With ether there is often some spasm, and respiration stops for a time, but a tap on the chest or rotating the head starts it again as a rule. If inspiration seems difficult, remove any mucus from the fauces with the finger, draw out the tongue with a pair of artery forceps and pull it well forward so as to open the glottis. If this does not succeed, artificial respiration must be resorted to while the tongue is still drawn forward; but it is satisfactory to say that I have never yet needed to have recourse to it.

The color of the skin of the ears is a good index to the state of the circulation. If these are livid the administration should be stopped temporarily.

After the operation. It is prudent not to leave the patient until he has shown signs of returning consciousness. This may be hastened by sponging his face with cold water, or slapping it gently with a wet towel, not so roughly as to cause marks. Sometimes holding the nose provokes a long inspiration through the mouth, followed by the sudden return to consciousness. This maneuver is of no use when ruder measures fail, but it may precede them, and is often successful.

Where chloroform, for any of the reasons given above, is to be preferred, I administer it on a towel folded square. The preliminary arrangements and precautions are much the same as in the case of ether; but the patient requires if possible more careful watching. The reflex sensibility of the eye must be tested frequently: when it is abolished the operation may commence, and the chloroform should be administered with caution. Stertorous breathing is a warning to sus-

pend the administration. Should the respiration stop, the tongue must be drawn out, and artificial respiration commenced at once. The respiration must be watched continuously. The pulse may be disregarded, as it gives no timely warning of approaching danger. ***Although chloroform does not require to be administered continuously, it is not less necessary to continue to watch the respiration, even though no chloroform is being given.*** Accidents often happen from disregard of this precaution. The chloroform may be safely poured freely on the towel, but this should be cautiously approached to the face, until finally the fingers of both hands press its lower edge against the margin of the jaw, while the surface of the towel forms an angle of forty-five degrees with the face.

I have had two deaths from anesthetics—one from chloroform and one from ether. The former was a case of gummatous disease of the larynx, for which tracheotomy was performed when the patient was nearly moribund from asphyxia. The other was from acute edema of the lungs supervening some hours after the administration of the ether. Both were hospital cases. In the numerous administrations I have had in private I have never met with a case which has given me any cause for alarm, though many have given me much anxiety.

The points which I desire especially to insist upon are: 1. Ether is to be generally preferred as an anesthetic; 2. Inflammatory affections of the lungs and the air-passages absolutely contra-indicate its employment; 3. It should be the sole business of one person to administer the anesthetic during an operation; 4. The breathing must be watched so long as the patient is under the influence of the anesthetic, whether it is still being administered or not.

Ulcerative Keratitis.—J. R. Wolfe, M.D., Lecturer on Ophthalmology at Anderson College, Glasgow, speaks in the following simple way of this affection and its treatment:

In this disease we have the softening and elimination of the corneal substance. This may either assume the sthenic or the asthenic form. The sthenic form is accompanied with ciliary pain, photophobia, lachrymation, and pericorneal inflammation. Oblique illumination shows the disappearance of the epithelium. The border of the ulcer is grayish and swollen. In the asthenic ulcer there is very little or no ciliary pain, neither photophobia nor lachrymation.

Causes. Debilitated subjects and scrofulous children are generally liable to it. Injuries of the cornea, however slight, may in some cachectic subjects generate an ulcer. Conjunctivitis, acute or chronic,

when deep, may also, by interfering with the nutrition of the cornea, cause ulceration.

Prognosis is more favorable in the acute than in the chronic form, when it may entirely disappear. In the indolent form there is a risk of a white cicatrix (leucoma) or fistula, and the iris may adhere to the cicatrix (leucoma adherens).

Treatment. Local—Atropine; calomel insufflation; warm fomentations; compress with bandages. The less you open the eye the better. All cauterization, and teasing the cornea with washes, I think prejudicial and ought to be avoided. In the asthenic type I use the steam cautiously with the view of producing reaction. Indeed, I think this remedial measure worth all the remedies combined.

When a fistula has formed which proves obstinate, an iridectomy should be performed. I have seen a fistula of twelve years' standing which used to be a source of great annoyance to the patient, bursting periodically, upon which an iridectomy acted like a charm. The operation should be done whether there is a hernia iridis or not. When there is a prolapse I never interfere with it, but I make an artificial pupil in a line opposite to it.

General treatment. Tonics.

THE SULPHO-CARBOLATES.—Dr. Withers thus writes (Dublin Journal of Medical Science) of the value of this class of remedies as used in the Dublin Fever Hospital:

Cases of scarlatina on admission receive a tepid bath, and the sulpho-carbolate of soda in solution. The diet is milk. The dose of the sulpho-carbolate is ten grains every two hours; five grains for children. Thirty-one cases of scarlatina have been treated, more than one half being of the simple form of scarlatina, which is said by some to get well without any treatment; however, during the progress of the fever, advantages in the above treatment have been noticed which will place this medicinal agent far in preference to others. Of these thirty-one cases there were three deaths, a mortality of 9.7 per cent. This I think is a low death-rate, when we consider that about one quarter of the cases were of an anginous or malignant character. The results of this special treatment in these thirty-one cases have been almost unvaried. The absorption of the sulpho-carbolate of soda into the system is noticed at about the end of twenty-four hours, by the evidence of an almost complete cessation of throat symptoms. The tonsils are of a dirty white color, as if touched with a mild caustic, and their enlargement is observed to diminish quickly. The tem-

perature and general fever lessen, and the patient proceeds rapidly to convalescence. In no case have I noticed any dropsy, and in the majority there was very slight, if any, desquamation. I have, therefore, every confidence in the substitution of the sulpho-carbolate as an antiseptic antipyretic in the place of the former diaphoretic and expectant treatment of scarlatina. It has been most satisfactory, the recovery of the patients being rapid and complete, and the mortality rate being very low.

The sulpho-carbolate of soda in a few cases of smallpox has been administered with marked success—twenty-five in number, and of them we had two deaths, one a young man in whom the disease was confluent and hemorrhagic, and the other a child of four months old, ill with marasmus, and who received the variolous poison from its wet-nurse. Thus a death-rate of eight per cent. In a like number of cases treated in 1878 by other means it was sixteen per cent. The internal treatment is similar to that of scarlatina, but occasionally an alcoholic stimulant or a sedative is required. It has been found that when the patient is seen early and treatment at once commenced then the primary fever is lessened, the throat symptoms which are so troublesome, when the soft palate and fauces are covered with pustules, disappear rapidly—often in twelve hours; and what is more remarkable in none of the cases so treated has any secondary fever been observed. I can not say that the internal administration of the sulpho-carbolate has any effect on the scars of the pustules.

In acute tonsilitis the sulpho-carbolate of sodium was eminently useful, the hypertrophy of the tonsils rapidly subsided, rarely was there any suppuration, and power of swallowing was restored in from three to four days. In this affection I think the iron salt will prove most useful, as I have noticed cases where the patient was much prostrated—in fact in a typhoid condition; and I believe that the administration of the iron preparation will be more satisfactory than the sodium salt, although the latter is very beneficial when combined with quinine.

TREATMENT OF RINGWORM.—A writer in the British Medical Journal says:

I think your readers will be glad to hear of a remedy which I have recently used with complete success. It is the active principle of goa powder, chrysophanic acid, in the proportion of one dram to one ounce of vaseline. The result has been the rapid destruction of the fungus, and consequently a complete cure.

ANGINA PECTORIS.—Prof. Potain, in a clinical lecture (*Gaz des Hôp*) observed that he believed that three forms of this affection can be distinctly recognized, all characterized by agonizing substernal pain, propagated in the paroxysmal form to the upper extremities. It differs from ordinary dyspnea, as there is no oppression (properly so-called), but a kind of constriction of the parietes of the thorax.

1. The first form, symptomatic of a lesion of the coronary arteries, may be regarded as terminating fatally in death. The lesions may vary somewhat, but Prof. Potain agrees with Jenner that they usually consist in obstruction of the coronaries. In thirty-six cases lesion of the coronary arteries was observed. The mere existence of atheroma will not explain the occurrence of angina, unless actual narrowing of the vessels be also present. The symptoms of this form present special characters. The paroxysm supervenes on difficult digestion or on movements made during digestion, but is never declared while the patient is in a state of repose. It is also accompanied by radiations of pain along one or both of the upper extremities, and especially the left.

2. The second form differs completely from the first, inasmuch as it is not connected with any lesion of the coronary arteries, but assumes the characteristics of a true neurosis. It is met with either in the subjects of rheumatism or in nervous persons; is of much less importance than the other form; and occurs oftener in private than in hospital practice. It comes on under the influence of cold and damp. Thus, a young woman, who, after having been heated in dancing, had exposed her uncovered neck to an open window, was seized during the night with a fearful paroxysm of sternal constriction with irradiation of the pain down to her left hand, which, after lasting for some hours, disappeared to recur nightly for more than a week. The paroxysms were then separated by longer intervals until they entirely disappeared, leaving no trace behind. No cardiac or other appreciable lesion had preceded the attack. In this case the paroxysms did not arise under the influence of movements, but came on spontaneously during the night, "at what I may term the time of false croup." Moreover their duration was longer, as they persisted one or two hours, and even sometimes longer; the patient in the intervals enjoying perfect health, being able to ascend or run with the greatest facility. On the other hand in symptomatic angina, when the fit is off, the patient is still unable to ascend the slightest acclivity, while the paroxysm never

comes on when he is in a state of repose, and scarcely lasts for some minutes. In this second, rheumatismal or nervous form, Prof. Potain has never met with a fatal case, so that the prognosis is entirely different. So is its etiology; for while symptomatic angina is especially met with in men of a certain age, and in gouty subjects, this second form particularly appears in young and nervous women.

3. In the third form while the accidents are the same the circumstances are quite different, the origin and true cause of the disease being generally found in an affection of the heart of an old date. This is a dilatation of the organ, whether it be the result of chronic disease of the lungs (sclerosis, emphysema, etc.), primary gastric disturbance, or a pulmonary affection complicated with gastric disturbance. The patient is seized after a meal, and especially if this meal has been followed by rapid walking, with a deep-seated sense of anguish and oppression and suffocation, without true dyspnea. The pain, which is sometimes substernal, is much oftener seated in the cardiac region itself (pain in the heart, as it is called), and is accompained by a feeling of plenitude and not of constriction, and by a numbness which often irradiates along the left upper extremity. Although no statistics on the subject exist, this form would seem to be of more frequent occurrence than the second, and perhaps even than the first. While the prognosis, however, of the first is fatal, and that of the second is generally favorable, the symptoms of this third form are mere epiphenomenon, which of itself does not constitute the true danger.

In the treatment of the first form of the affection there is unfortunately little to be done, especially during the paroxysm, the short duration of which hardly allows of intervention. If, however, it is at all prolonged morphia injections may be useful. In the intervals Prof. Potain has derived benefit from the iodide of potassium, which exerts a favorable influence on chronic arteritis; and arsenic or the bromides may be recommended on account of their action on the nervous system. The second form requires quite a different treatment. During the paroxysms, external derivatives (blisters and sinapisms) and antispasmodics (camphor, assafedita, and ether) should be resorted to; and in the intervals vapor or sulphurous baths, tonics, chalybeates, country air, etc. In the third form the treatment must vary according to whether the disease result from gastric disturbance or some pulmonary lesion. But, in any case, one of the most immediate indications is absolute repose—and that more absolute perhaps than in this first form, if a cure of the affection is to be sought for.

AMBLYOPIA FROM ABUSE OF ALCOHOL AND TOBACCO.—Dr. David Webster, of New York, in a paper in the Medical Record draws from the cases he has seen of amblyopia the following conclusions:

1. Amblyopia from poisoning by alcohol alone, or by alcohol and tobacco combined, is not uncommon.

2. Amblyopia from poisoning by tobacco alone does occur, but in this country somewhat rarely.

3. Cases of amblyopia from abuse of tobacco and alcohol will usually improve, perhaps to a limited extent, on simple abstinence from the poisons causing the disease.

4. They will improve much more rapidly under treatment by hypodermic injections of strychnia, this drug having a specific stimulating influence upon the nervous portion of the visual apparatus.

ESSENCE OF WINTERGREEN IN PURULENT CYSTITIS.—M. Perier, of the St. Antoine Hospital, Paris, says:

It is a powerful antiseptic irritant. Its price is high, but it is given in very small doses. It is procured from the *gualtheria procumbens*. Chemically the essence is called salicylate of methylene, or methyl-salicylic ether; is only slightly soluble in water. Dr. Perier employs the following combination: ℞. Essence of wintergreen, six grams; tinct. of guillaya saponaria, thirty grams; water, one liter. This forms an excellent fluid for injecting into the bladder, for washing wounds, and for some simple dressings.

EXTIRPATION OF THYROID GLAND IN GOITER.—Billroth has recently performed successfully extirpation of the thyroid gland in cases of goiter. He uses strictly antiseptic precautions. In the first forty cases upon which he operated there was only one death. The main difficulty is to control the hemorrhage, which he accomplishes by seizing with two of Péan's forceps every piece of tissue to be divided and cutting between them. Formerly hoarseness was a frequent result of the operation; this is now avoided by carefully dissecting out the recurrent laryngeal nerves. Billroth's antiseptic method, by the use of which he obtains such eminently satisfactory results, omits the use of spray. He considers it not only inconvenient to the operator

and assistants but dangerous to the patient, as it may by excessive cooling induce collapse. In lieu of this the wound is irrigated with a five-per-cent solution of carbolic acid. (Vienna Letter in Chicago Medical Review.)

SAYRE'S JACKETS.—The treatment of spinal curvature with plaster jackets, according to the method of Sayre, is rapidly becoming very popular here. One of Billroth's assistants, Wittelshöfer, has obtained excellent results by the use of Sayre's jacket in Pott's disease, but has not met with as great success in the treatment of spinal curvatures. (*Ibid.*)

REMOVAL OF NEVUS.—Dr. Madras writes to the Medical Press and Circular that he removes a nevus by vaccinating the nevus with liquid vaccine lymph, from which inflammation sets in, and in ten days instead of the purple appearance of the nevus there is left a white cicatrix; and adds, "I wish all medical men would follow my plan in vaccinating infants with nevus by vaccine lymph."

[We have used vaccine lymph for this purpose in cases we thought suitable, but without a success at all uniform or satisfactory.—ED. PRAC.]

Notes and Queries.

BETTER TIMES.

'T is ever and ever thus from childhood's interesting yet not wholly happy hour. There is never the end of an Old year but comes the beginning of a New one.

The gentlest of readers need not be startled by this seeming paradox, because it is, though very far from gay, not without a certain wisdom of its own, and is assuredly truthful.

The years come and go. The world grows older, and so do we; always a few pains the more in the back, which indeed are to be endured only through the composure, the courage, and the grace of a good manhood—and not easily so borne; cares always multiplying about the heart. The heart! what a little world it is! how populous! how complex! What wars it has, what loves, what hates, what griefs! It is as a Nation which begins a Republic, to end in a Despotism preceding chaos and utter oblivion.

Delenda est Carthago, or words to that effect; all must perish, but chiefly those who do not look to science, who do not love her, fear her, rely upon her, and pay her a fair day's wages for a fair day's work. Science! she is the only progress. She never sleeps. She never stops. Like the sun, she "renews her light forever." Like a Government-bond, science, unwearied and unwearying—though not, like the Government-bond, untaxed—is toiling for each and all of us, to lighten the load of ignorance that presses us down, down; to subtract the groans from the pains, to multiply the blessings, and, in short, to reduce the algebraic problems of death and disease to a tangible, simple single rule of three: Discretion+Understanding+Knowledge= the Ends of Life! But here science, pursuing the doctrine that God helps those who help themselves, says to man, "I can show you how to be healthy, wealthy, and wise; but you alone can teach yourself how to be happy;" wherein comes our observa-

tion about the heart—which "observation," as Cuttle (or was it Cuttle?) would say, "lays in the application on't." In truth, the heart, as far as science goes, is almost as mysterious as the soul, which is a perfect mystery. Wherefore, brethren, look ye each to his own heart, albeit not downward, *sursam corda!*

The years go on and on and ever on, and death and taxes and unpaid doctors' bills accumulate. But it is worse than folly to cry, and sometimes things are too tragic to laugh at. The middle course is safest—in moderation to eat and drink, and, if not merry, to be content; for next year will be sure to right the wrongs of this, if we have only the wit to forget them. The present is with us; the future is with God. Life's troubles come never too late, and sorrow is one of the penalties of anticipating sorrow. The Old Year is gone. Here stands the New Year, all bridled and saddled, at the door. Brother, his name shall be "Better Times" if you will it so. Mount, and a happy ride to you!

"If to hope overmuch be an error,
'T is one that the wise have preferred;
For how often have hearts been in terror
Of evils that never occurred?

"Have faith, and thy faith shall sustain thee;
Permit not suspicion or care
With invisible bonds to enchain thee;
But bear what God gives thee to bear.
By His Spirit supported and gladdened,
Be ne'er by forebodings deterred;
But think how oft hearts have been saddened
By fear of what never occurred.

"Let tomorrow take care of tomorrow;
Short and dark as our life may appear
We make it the darker by sorrow—
Still shorter by folly and fear.
Half our troubles are half our invention,
And often from blessings conferred
Have we shrunk in our wild apprehension
Of troubles that never occurred."

Dr. Tanner Again.—Dr. Forbes Winslow alludes to the American performance, and in expressing his doubts as to the genuineness of the exhibition says, "The instant return of an

excessive appetite at the conclusion of the fast, and the wonderful tolerance shown by Dr. Tanner's stomach for large quantities of solid food, when, by all ordinary experience, it could scarcely be supposed capable of receiving the smallest amounts of even the lightest nutriment, lend perplexing appearances to the whole business." (Journal of Psychological Medicine.)

BERNHARD VON LANGENBECK.—On the 9th of November in Berlin, 1880, Professor von Langenbeck completed his seventieth birthday, and it was made quite a gala day. Their Majesties the Emperor and Empress forwarded autograph congratulations, and the chief societies (medical and others), the students, besides many private friends, poured in their congratulations from early morning and throughout the day. One of the most remarkable scenes in connection with the day's proceedings was the presentation of an address by his former house-surgeons (assistants, as they are termed in German). These included Esmarch, Billroth, Busch, Trendelenburg, Hueter, Schönborn, who attended in person; while among the signataries to the address were Gurlt, Lücke, Bose, Friedberg, Schädel, and many others. It would be difficult to get together another such a list of foremost names, yet all these men deem it one of their greatest privileges to have served under the great surgeon and to be able to rank themselves as his more immediate pupils. It was doubtless a proud moment for Professor von Langenbeck, and the congratulations he received must have almost overwhelmed him. We heartily wish von Langenbeck health and strength to enjoy his well-deserved, honored reputation for many long years yet to come. (Med. Times and Gaz.)

"A PURE DRINKING-WATER."—Professors Hofmann, of Berlin, and Kekule, of Bonn, and other chemists, have published analyses of Apollinaris water, which all agree in showing that it is a very pure water, with about one quarter the quantity of alkaline salts contained in Vichy water.

TO SMOKERS.—Thymol is said to have the property of immediately removing the odor of tobacco.

THE JOVIAL LEUCOCYTES.

Two translucent leucocytes, careless and free,
Who so unitedly conscious as we?
With pseudopods joined for want of a hand,
We jostle our comrades, a rollicking band,
Through life's fruitful stream, now red and then blue,
Stocked with food for our thoughts and our protein too.

How badly my lady would relish her rest
If she knew what a life we lead in her breast.
How, in a short voyage from artery to vein,
We can fathom some tiny recess in her brain,
Rouse a secret memory that she would fain hush;
For we learn this result by the tell-tale blush
When we seek through a vessel's diaphanous wall
To pay the gray cells a personal call.

Then we simulate hope, make her heart palpitate
With a sweet dream of love, or with terror, or hate.
But enough; we are summoned by this vascular eddy
To the root of the vagus, our liver to steady.
Decolletée costumes with very tight stays,
Champagne and ice-cream, nights turned into days,
Will shortly produce in the most supercilious
A train of queer symptoms named commonly "bilious."

The fact is, our hostess is suffering a while
From the effects of a torpid secretion of bile!
Farewell, gentle reader! When you talk of free will,
Think how much must depend on us (or a pill)!

THE INTERNATIONAL MEDICAL CONGRESS OF 1881.—From the circular of the Executive Committee, dated London, September, 1880, we learn that—

The work of the Congress will be carried on in fifteen sections. The days of the meeting will extend from Wednesday the 3d to Tuesday the 9th day of August, both days included. A reception of welcome will take place on the evening of August 2d. The meetings will be chiefly held in the halls of the University of London and in Burlington House, where, in a most liberal manner, the use of rooms for the general and sectional meetings has been granted to the Congress by the authorities of the University of London, the Royal Society, the Society of Antiquaries, the Astronomical Society, the Linnean Society, the Chemical Society, and the Geological Society. There will be a museum open during the meeting, to which contributions of professional interest will be made. Evening receptions will be held, and

excursions arranged to various places of interest. The attendance of our countrymen from all parts of the United Kingdom, India, and the Colonies will probably be large, and various circumstances make it probable that a large number of distinguished men from many countries will be attracted to England as our guests on the occasion of the Seventh Session of the Congress, and it is our desire to receive them with all cordiality and honor. It is convenient to inform our colleagues abroad that ladies will be invited to the social and ceremonial meetings of the Congress, but will not be admitted to its business meetings. It will be necessary for all who wish to make communications to the Congress to intimate their intentions to the secretaries of the several sections, and to furnish an abstract of their papers before the 30th of April, when the committee hope to complete the arrangements for the meeting and to issue a programme of business. All communications respecting the Congress should be addressed to William MacCormac, Esq., Hon. Secretary-general, 13 Harley Street, London, W.

"What a Surgeon Should Be."—Guy de Chauliac wrote in 1363—

That the surgeon should be learned, skilled, ingenious, and of good morals; be bold in things sure, cautious in dangers; avoid evil cures and practices; be gracious to the sick, obliging to one's colleagues, wise in his predictions, be chaste, sober, pitiful, and merciful; not covetous nor extortionate of money, but the recompense be moderate, according to the work, the means of the sick, the character of the issue or event and its dignity.

What sounder advice can be offered in five centuries?

The Medical Profession and the Homeopaths.—The profession distinctly refuses association with homeopaths because it believes the tenets of that schism—and more especially infinitesimalism—are not doctrines which may be honestly held by reasonable, thinking, and educated gentlemen, but are on the contrary theories put forward to attract the uninitiated and impressible section of the public. Of the doctrine of "*Similia similibus curantur*" we do not speak now, for although with some knowledge of what has been written in its favor, we believe it to be unscientific, delusive, and erroneous, we can still conceive a practitioner honestly holding it and acting upon it. But with regard to infinitesimalism we can not use any other phrase than

to characterize it as a fraud to which no practitioner worthy of professional association should descend. We know, as a matter of fact, that very many homeopaths do not practice on such principle . . . ; and with every desire to take the broadest and most charitable view of the erratic ideas of individual practitioners, we really can not coerce our intelligence to believe that homeopaths have any more real confidence in the doxology advocated in the homeopathic Koran than we have. (Medical Press and Circular.)

Mark Twain's Recipe for New England Pie.—To make this excellent breakfast dish proceed as follows: Take a sufficiency of water and a sufficiency of flour and construct a bullet-proof dough. Work this into the form of a disk, with the edges turned up some three fourths of an inch. Toughen and kiln-dry it a couple of days in a mild but unvarying temperature. Construct a cover for this redoubt in the same way and of the same material. Fill with stewed dried apples; aggravate with cloves, lemon-peel, and slabs of citron; add two portions of New Orleans sugar; then solder on the lid and set in a safe place until it petrifies. Serve cold at breakfast and invite your enemy.

Angels in the House.—M. Bertillon, in the statistical tables of suicides for France and Sweden, says they establish the two following laws: 1. Widowers commit suicide more frequently than married men. 2. The existence and presence in the house of children diminishes the inclination to suicide both in men and in women. (British Medical Journal.)

For the benefit of our more conservative brethren we arrange in alphabetical order the names of some of the newest of the great remedies presented to the profession: Areca, ava, bael, berberis, boldo, cercis, coto, chaulmangra, goa, gurjun, hoang nung, penthorum, quebracho, sumbul, sundew, and tonga. (Proc. Med. Soc. County of Kings.)

Registration.—Two thousand two hundred and fifty physicians have registered in New York City alone, since the passage of the New York medical practice act.